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MIDDLEBURY COLLEGE BULLETIN

THE CATALOGUE
1912-1913

MIDDLEBURY, VERMONT
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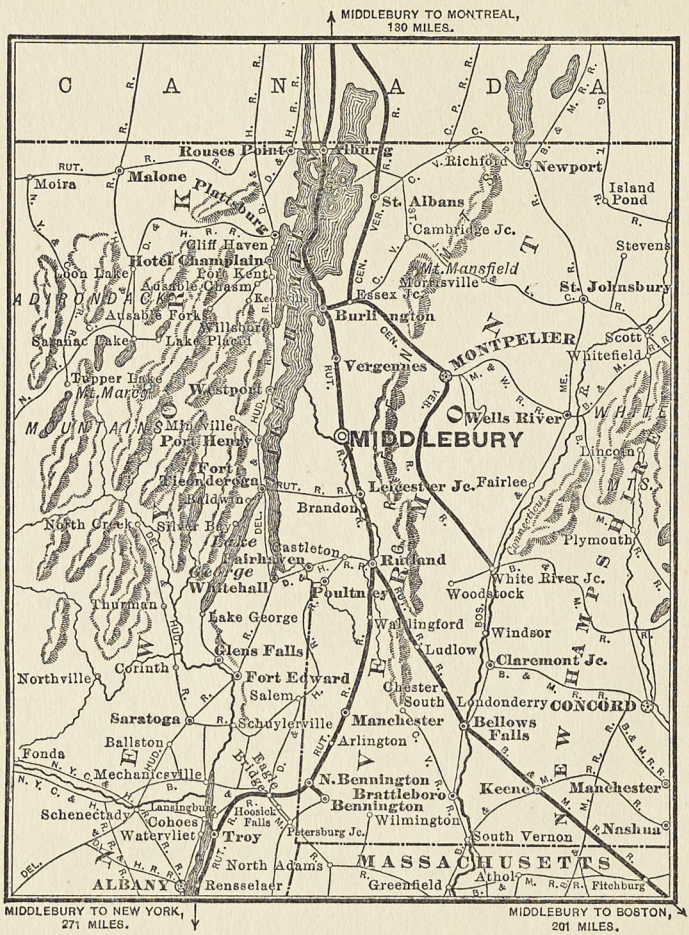

THE CENTRAL COLLEGE OF VERMONT

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A Catalogue of Middlebury College

Middlebury, Vermont

One Hundred and Thirteenth Year

1912-1913

Published for the College

1912

D. B. UPDIKE, THE MERRYMOUNT PRESS, BOSTON

CHARTER

OF MIDDLEBURY COLLEGE

IT *is hereby enacted* by the General Assembly of the State of Vermont, That there be, and hereby is granted, instituted and established a College in the Town of Middlebury, in the County of Addison; and that Messrs. Jeremiah Atwater, Nathaniel Chipman, Heman Ball, Elijah Payne, Gamaliel Painter, Israel Smith, Stephen R. Bradley, Seth Storrs, Stephen Jacob, Daniel Chipman, Lot Hall, Aaron Leeland, Gershom C. Lyman, Samuel Miller, Jedediah P. Buckingham and Darius Matthews shall be an incorporate society, or body corporate and politic, and shall hereafter be called and known by the name of THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE: and that by the same name, they, and their successors, shall and may have perpetual succession; and shall and may be persons capable in law, to be impleaded, defend and be defended, answer and be answered unto; and also to have, take, possess, acquire, purchase or otherwise receive lands, tenements, hereditaments, goods, chattels, or estate; to grant, demise, lease, use, manage, or improve for the good and benefit of the said College according to the tenor of the donations, and their discretion. SECTION 1

And it is hereby further enacted, That the said President and Fellows, and their successors, shall and may hereafter have a common seal, to serve and use for all causes, matters and af- SECTION 2

fairs of theirs, and their successors, and the same seal to alter, break and make anew, as they shall think fit.

SECTION 3 *And it is hereby further enacted*, That the said Jeremiah Atwater shall be, and he is hereby established the present President; and the said Nathaniel Chipman, Heman Ball, Elijah Payne, Gamaliel Painter, Israel Smith, Stephen R. Bradley, Seth Storrs, Stephen Jacob, Daniel Chipman, Lot Hall, Aaron Leeland, Gershom C. Lyman, Samuel Miller, Jedediah P. Buckingham and Darius Matthews shall be, and they are hereby established the present Fellows of the said College; and that they and their successors shall continue in their respective places, during life, or until they, or either of them, shall resign, be removed, or displaced, as in this act is hereafter expressed.

SECTION 4 *And it is hereby further enacted*, That there shall be a general meeting of the President and the Fellows of the said College, in the said College-House, on the first Tuesday of November, annually, or, at any other time and place, which they shall see cause to appoint, to consult, advise and act, in and about the affairs and business of the said College; and that on any special emergency, the President and two of the Fellows, or any four of the Fellows, may appoint a meeting at the said College. Provided they give notice thereof to the rest, by letters sent and left with them, or at the places of their respective abodes, ten days before such meeting, and that the President and six Fellows, or, in the case of death, absence, or incapacity of the President, seven Fellows, convened as aforesaid, (in which case the

oldest Fellow shall preside) shall be deemed a meeting of the President and Fellows of said College; and in all the said meetings a major vote of the members present shall be deemed the act of the whole, and when an equivote happens, the President shall have a casting vote. That the President and Fellows of the said College and their successors, in any of their meetings assembled as aforesaid, may, from time to time as occasion shall require, elect and appoint a President or Fellows, and also the same remove, from time to time, for any misdemeanor, unfaithfulness, default or incapacity, six of the said corporation, at least, concurring therein; and shall have power to appoint a scribe, or register, a treasurer, tutors, professors, steward and butler, and all such other officers and servants as are usually appointed in colleges and universities, as they shall find necessary and think fit to appoint; for promoting good literature, and well ordering and managing the affairs of said College; and them, or any of them, at their discretion, to remove. And to prescribe and administer such forms of oaths, not being contrary to the constitution and laws of this State, or of the United States, as they shall think proper to be administered, to all those officers and instructors of the said College, or to such and so many of them as they shall think proper, for the faithful execution of their respective places, offices, and trusts.

And it is hereby further enacted, That the President and Fellows shall have the government, care and management, of the said College, and all the matters and affairs thereto belonging; and shall have power from time to time, as occasion shall

SECTION 5

require, to make, ordain, and establish all such wholesome and reasonable laws, rules and ordinances, not repugnant to the constitution and laws of this State, or the United States, as they shall think fit and proper, for the instruction and education of the students, and ordering, governing, ruling and managing the said College, and all matters, affairs, and things thereto belonging; and the same to repeal and alter, as they shall think fit, which shall be laid before the Legislature of this State, as often as required, and may also be repealed or disallowed by the said Legislature when they shall think proper.

SECTION 6 *And it is hereby further enacted*, That the President of the said College, with the consent of the Fellows, shall have power to give and confer all such honors, degrees, or licenses, as are usually given in colleges, or universities, upon such as they think worthy thereof.

SECTION 7 *And it is hereby further enacted*, That all the lands and ratable estate that does or shall belong to the said College, not exceeding the yearly value of two thousand dollars, lying in this State; and the persons, families, and estates of the presidents and professors, lying and being in the town of Middlebury, of the value of one thousand dollars, to each of said officers, and the persons of the tutors, students, and such and so many of the servants of said College, as give their constant attendance on the business of it, shall be freed and exempted from all rates, taxes, military service, working at highways, or other such like duties and services.

And it is hereby further enacted, That the Governor of this State be, and he is hereby empowered and requested to issue to the said President and Fellows, named in this Act, and to their successors, a charter of incorporation, made in due form of law, agreeably to the same. SECTION 8

Provided nevertheless, and it is hereby further enacted, That nothing in this Act, or any part thereof, shall be construed to extend to, or give to said corporation, by virtue thereof, any right to hold, possess or enjoy any property or estate, which has heretofore been granted or intended to have been granted, or given in charge and reserve, for the use of a college, or colleges, in this State; or granted, or intended to have been granted, and apportioned by this State to the University in Vermont. SECTION 9

Passed November 1st, 1800.

A true copy, attest,

ROSWELL HOPKINS, *Secretary.*

BEQUESTS

The Corporate name of Middlebury College is THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE. *Bequests should be made in this name.*

THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE

Rev. John M. Thomas, d.d., ll.d., President	*Middlebury*
Hon. John W. Stewart, ll.d.	*Middlebury*
Hon. Joseph Battell, a.m.	*Middlebury*
Brainerd Kellogg, ll.d.	*Morristown, N. J.*
Ezra Brainerd, d.d., ll.d.	*Middlebury*
Hon. David K. Simonds, a.b.	*Manchester*
Erastus H. Phelps, a.m.	*Fair Haven*
Hon. John A. Mead, a.m., m.d., ll.d.	*Rutland*
Henry H. Vail, ll.d.	*New York, N. Y.*
George M. Wright, ll.d.	*New York, N. Y.*
Rev. James L. Barton, d.d.	*Boston, Mass.*
M. Allen Starr, m.d., ph.d., ll.d.	*New York, N. Y.*
James M. Gifford, ll.d.	*New York, N. Y.*
Hon. John G. McCullough, ll.d.	*Bennington*
Julian W. Abernethy, ph.d.	*Burlington*
John A. Fletcher, a.b.	*Middlebury*
Rev. Rufus C. Flagg, d.d.	*Burlington*
Hon. A. Barton Hepburn, ll.d., d.c.l.	*New York, N. Y.*
Hon. John E. Weeks, a.m.	*Middlebury*
Hon. Frank C. Partridge, ll.d.	*Proctor*
William H. Porter, ll.d.	*New York, N. Y.*

John A. Fletcher
Secretary and Treasurer

Charles E. Pinney
Auditor

PRUDENTIAL COMMITTEE

President John M. Thomas
John W. Stewart
Ezra Brainerd
John A. Fletcher
John E. Weeks
Frank C. Partridge

FINANCE COMMITTEE

George M. Wright
William H. Porter
A. Barton Hepburn
James M. Gifford
Frank C. Partridge

COMMITTEE ON INSTRUCTION

Julian W. Abernethy
Brainerd Kellogg
Henry H. Vail
Rufus C. Flagg

BUILDING COMMITTEE

President John M. Thomas
Julian W. Abernethy
Henry H. Vail
John E. Weeks
Frank C. Partridge

THE FACULTY AND OFFICERS

JOHN MARTIN THOMAS, D.D., LL.D.
President

EZRA BRAINERD, D.D., LL.D.
President-emeritus

HENRY MARTYN SEELY, A.M., M.D.
Professor-emeritus of Natural History

CHARLES BAKER WRIGHT, A.M., L.H.D.
Professor of Rhetoric and English Literature

WILLIAM WESLEY MCGILTON, A.M.
Professor of Chemistry

MYRON REED SANFORD, A.M., L.H.D.
Professor of the Latin Language and Literature

ERNEST CALVIN BRYANT, S.B.
Baldwin Professor of Physics

EDWARD ANGUS BURT, PH.D.
Burr Professor of Natural History

WILLIAM SARGENT BURRAGE, PH.D.
Professor of the Greek Language and Literature

EDWARD DAY COLLINS, PH.D.
Professor of Pedagogy

RAYMOND MCFARLAND, A.M.
Professor of Secondary Education

ARCHIBALD DARIUS WETHERELL, A.M.
Assistant Professor of History

DUANE LEROY ROBINSON, A.M.
Assistant Professor of French, Levi P. Morton Foundation

G. WATTS CUNNINGHAM, PH.D.
Assistant Professor of Philosophy

FRANK WILLIAM CADY, A.M., B.LITT. (OXON.)
Assistant Professor of English

EVERETT SKILLINGS, A.M.
Assistant Professor of German

PHELPS NASH SWETT, S.B.
Assistant Professor of Engineering

RAYMOND HENRY WHITE, A.M.
Assistant Professor of Latin

AVERY ELDORUS LAMBERT, PH.D.
Dean, and Assistant Professor of Zoölogy

CHAUNCEY ALLAN LYFORD, B.S., A.M.
Assistant Professor of Geology

GEORGE HOFFMAN CRESSE, A.M.
Assistant Professor of Mathematics

JOHN ALLEN MORGAN, A.M.
Assistant Professor of Political Economy

RAY LYLE FISHER, A.B.
Assistant Professor of Physical Education

GEORGE PORTER PAINE, A.M.
Assistant Professor of Mathematics

GUY BERTRAM HORTON, A.M.
Instructor in Political Science (non-resident)

PERLEY CONANT VOTER, A.M.
Instructor in Chemistry

IRVING WILDER DAVIS, B.S.*
Instructor in Pomology

CAROLINE CRAWFORD
Dean of Women, A. Barton Hepburn Foundation, and Assistant Professor of Physical Education and Art

* On leave of absence for the year.

EFFIE PARMELEE WELLS, M.S.
Instructor in Home Economics

ETTA MAY CLARK
Librarian

EDITH J. CHAMBERLAIN
Cataloguer

FRANK W. CADY
Registrar

JENNIE H. BRISTOL
Assistant Registrar

JOHN E. WEEKS
Superintendent of Buildings and Grounds

ETHEL F. BARTLETT
Secretary to the President

WILLIAM H. FARRELL, HENRY HOPKINS, CHARLES JEWETT
Janitors

MRS. WILLIAM MILLS
Superintendent of Women's Dining Hall and Matron of Batteil Cottage

ADA E. BRISTOL
Matron of Eddy Cottage

FACULTY COMMITTEES

ADMINISTRATION

WRIGHT, MCGILTON, BRYANT, CADY, LAMBERT

CURRICULUM

COLLINS, WRIGHT, SANFORD, LYFORD

ADMISSION

CADY, LAMBERT, ROBINSON

GRADUATE WORK

SANFORD, BURT, WHITE

LIBRARY

MCFARLAND, SKILLINGS, MORGAN

ATHLETICS

WETHERELL, SWETT, FISHER

STUDENT LIFE

MISS CRAWFORD, LAMBERT, BURRAGE, WETHERELL, CUNNINGHAM

ADMISSION

PREPARATION FOR COLLEGE

IT is the desire of Middlebury College to relate its work to that of high schools and academies by offering admission, as far as possible, to students who have completed in a creditable manner a four years' course of study in a good secondary school. The College does not wish to dictate what studies shall be pursued in high school, and in the matter of admission credits will deal fairly with any subject which principals, teachers, and governing boards of secondary schools think most useful for their pupils. For certain courses, however, certain subjects are prerequisites to work of college grade, and these are specified in the following sections.

While no general counsel can take the place of the advice of a principal who knows the student, it may be said that thorough training in the use of good English is indispensable in any high school course. Algebra, Geometry, and at least one foreign language are prerequisite to a scientific course. A classical course, or a course for teachers, must contain Latin, and may well include Greek. Although Greek may be begun in College, the loss to the student who does not offer it for admission is greater than is often imagined, and the student who would devote special attention to literature, history, or philosophy is advised to fit himself in the language which is at the root of all modern culture.

METHODS OF ADMISSION

ADMISSION to College may be gained by any one of three methods:

1. By examination. Examination in all subjects for admission will be held at Middlebury, Thursday and Friday of Commencement week, and during the opening week of the first semester. A schedule may be obtained from the Secretary of the Faculty.

2. By certificate of the College Entrance Examination Board or the Regents of the State of New York. All applications for the Board examinations, which will be held June 16–21, 1913, must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, and must be made upon a blank form to be obtained from the Secretary of the Board at least three weeks in advance of the examinations. The examination fee is $5 for all candidates examined at points in the United States and Canada.

3. By certificate from the principal of the high school or academy at which the student has prepared. Blank certificates, prepared by the College, will be mailed upon application.

A student admitted upon certificate is regarded as on probation the first year, and will be dropped at any time if he is manifestly incompetent to do the required work.

REQUIREMENTS FOR ADMISSION

FOR admission to any course, fourteen points, or admission credits, are required. A point is a preparatory subject pursued one year with five recitation periods a week. Certain points in each course are required; the remainder of the fourteen may be made up from the list of options. The Classical and Pedagogical Courses only are open to women.

The required and optional subjects are indicated below.

FOR THE CLASSICAL AND PEDAGOGICAL COURSES

Required Points	
Latin	4
English	3
Algebra	1½
Geometry	1
Total required points	9½

*Optional Points** (*Any four and one-half*)	
Greek	3
German	2 *or* 3
French	2 *or* 3
Greek History	½
Roman History	½
Medieval European History	½
Modern European History	½
English History	½
American History	½
Civics	½
Solid Geometry†	½
Physics	½ *or* 1
Chemistry	½ *or* 1
Botany	½ *or* 1
Physiology	½
Zoölogy	½
Physical Geography	½
Astronomy	½
Mechanical Drawing	1
Free-hand Drawing	1

FOR THE SCIENTIFIC COURSE

Required Points	
English	3
Latin, German, or French	2
Algebra	1½
Geometry	1
Total required points	7½

Optional Points (*Any six and one-half*)	
Latin	2, 3, *or* 4
German	2 *or* 3
French	2 *or* 3
Greek History	½
Roman History	½
Medieval European History	½
Modern European History	½
English History	½
American History	½
Civics	½
Solid Geometry†	½
Physics	½ *or* 1
Chemistry	½ *or* 1
Botany	½ *or* 1
Physiology	½
Zoölogy	½
Physical Geography	½
Astronomy	½
Mechanical Drawing	1
Free-hand Drawing	1

* For the Classical and Pedagogical Courses, Greek, German, or French must be presented, in addition to Latin.

† Students securing an admission credit in Solid Geometry will ordinarily be required to elect another study in its place, either in the Department of Mathematics or in some other Department of Instruction. In such cases Freshmen are allowed to take Sophomore Mathematics.

Equivalents for some of the above subjects, in either course, may be allowed in particular cases. Students slightly deficient in the total number of points required may be admitted on condition. Such conditions may be made up either by special examination before the beginning of the Sophomore year, or by successful completion of additional courses in the first year of College. The specific requirements in the several subjects named above are outlined in the following paragraphs.

DEFINITION OF ADMISSION POINTS

LATIN: Four points required for admission to the Classical and Pedagogical Courses; two, three, or four optional for admission to the Scientific Course.

In general, that proficiency in the subject is required which results from a study of Latin in a systematic course of five lessons a week for four school years.

Grammar and Composition. The requirement is that there shall be in memory a vocabulary of the prose authors which have been read in the school, a masterful knowledge of the inflections, including the common irregular forms, and such familiarity with the rules of syntax as shall enable the candidate to write simple Latin prose. The proficiency expected is such as is gained by continual exercises in prose composition during all the years of preparation.

The authors necessary are as follows: Caesar: *Gallic War*, Books I-IV; or connected readings from Caesar: *Gallic War*, *Civil War*, and Nepos: *Lives*, not less in amount than Caesar: *Gallic War*, Books I-IV.

Cicero: *Orations against Catiline*, *Poet Archias*, and the *Manilian Law;* or connected readings from Cicero: *Orations*, *Letters*, *De Senectute*, and Sallust: *Catiline*, *Jugurthine War*, not

less in amount than the four *Orations against Catiline*, *Poet Archias*, and the *Manilian Law*.

Vergil: *Aeneid*, Books I-VI; or Vergil: *Aeneid*, Books I, II, IV, or VI, and 2500 additional verses of any work of either Vergil or Ovid.

The examination will contain (1) passages for translation from the authors suggested above; (2) sight passages suited to the proficiency resultant from the reading of authors indicated above; (3) questions on forms, syntax, literature, history, and prosody of the passages. Special importance will attach to the candidate's ability to deal intelligently with forms and syntax.

In the preparatory work, too much emphasis cannot be placed on accurate and continued reading of the Latin, on the thorough memorizing of a few attractive passages of text, and on constant drill at the board in composition and syntax, especially such as finds illustration in the passages memorized.

For the convenience of candidates, the examination may be divided into Preliminary and Final, to be taken in successive years.

GREEK: Three points, optional.

The examination in Greek presupposes a three years' course of five exercises a week. It may be divided between two successive years. The authors set for examination are Xenophon: *Anabasis*, Books I-III, and 50 additional pages of Attic prose, taken from the *Cyropaedea*, or *Memorabilia*, or both. For these, 50 pages, Book IV of the *Anabasis*, may be substituted.

Homer: *Iliad*, Books I-III, omitting the Catalogue; or Book I of the *Iliad* and 1000 additional lines of Homer.

The examinations in Homer and Xenophon will contain also sight passages from both these authors, and questions on prosody, literature, history, and antiquities. There will also be an examination in Grammar and Composition, testing the candidate's knowledge of meanings, forms, and syntax and his ability to write detached sentences. This examina-

tion will be based on a passage taken from somewhere in the second book of the *Anabasis*, and presupposes daily drill continued through two years.

GERMAN: Three points, optional.

Examinations will include a practical test on oral and aural training; schools certifying candidates for admission will be required to state in the certificate whether the candidate has had proper training of this kind. By oral and aural training is meant that the candidate has been constantly trained in pronunciation, dictation, and free reproduction (at first in English and later in German) of German anecdotes read aloud by the teacher. No credit will be given for certificates of admission covering a shorter course than that prescribed in the Elementary requirement as stated below, except to candidates offering four years of Latin and three of Greek.

I. ELEMENTARY: *Two points.*

The Elementary requirement embraces a systematic course of four or five periods a week, extending over two school years.

During the first year the work should comprise: (1) careful and continuous training in oral and aural elements, including drill in pronunciation, writing German from dictation, reproducing in English German anecdotes read aloud by the teacher, simple questions and answers on the reading-matter; (2) memorizing and frequent repetition of common idiomatic expressions; (3) drill upon inflection of adjectives with nouns, of pronouns, weak verbs, and the more common strong verbs; upon word order and the use of the modal auxiliaries and the more common prepositions; (4) the reading of 75 to 100 pages of easy prose, with constant practice in retroversion (the teacher translating a sentence from a review passage into English and the pupil turning it back into the exact German of the text) and in translating into German easy variations of sentences selected from the reading lesson (the teacher giving the English).

During the second year the work should comprise: (1) the reading of 150 to 200 pages of easy prose, it being recommended that none of the classic drama be read in the second year; (2) continuation of the oral and aural training of the first year; (3) accompanying practice in retroversion and free reproduction, and translation into German of easy variations of short and easy selected passages; (4) continued drill upon the rudiments of grammar.

II. INTERMEDIATE: *One point.*

The Intermediate requirement calls for a third year's work, which should comprise, in addition to the Elementary course, the reading of about 400 pages of moderately difficult prose and poetry, with constant practice, as in the Elementary course, in oral and aural elements, and in giving paraphrases or reproductions from memory of selected portions of the reading-matter; also grammatical drill upon the less usual strong verbs, use of articles, cases, auxiliaries of all kinds, tenses and modes (with special reference to the infinitive and subjunctive), and likewise upon word order and word formation.

By the end of the third year the student should be able to dispense, for the most part, with translating into English.

For suggestions as to good reading-matter for both the Elementary and the Intermediate course, the *Report of the Committee of Twelve* (D. C. Heath and Co., Boston) is recommended.

FRENCH: Three points, optional.

Examinations will include a practical test in oral and aural training; schools certifying candidates for admission will be required to state on the certificate whether the candidate has had proper training of this kind; that is, whether he has had constant drill in pronunciation, dictation, and the free reproduction (at first in English and later in French) of anecdotes read aloud in French by the teacher. No credit will be given for certificates of admission covering a shorter course than

that prescribed in the Elementary course as stated below, except to candidates offering four years of Latin and three years of Greek.

ELEMENTARY: *Two points.*

The Elementary requirement embraces a systematic course of four or five periods a week, extending over two school years. During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, and the elementary rules of syntax, with constant drill upon exercises illustrating these principles; (3) the reading of at least 100 pages of graduated texts, with constant practice in writing in French easy sentences based on the texts read, and in free reproduction; (4) simple conversation, and the writing of French prose from dictation.

The work of the second year should include: (1) the reading of at least 200 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, and in the writing of sentences illustrative of syntactical principles; (6) conversation, and the answering in French by the student of questions based on the text read; (7) retroversion and original composition.

INTERMEDIATE: *One point.*

The Intermediate requirement implies a systematic course of four or five periods a week, extending over a third school year. The work should comprise: (1) the reading of at least 400 pages of French of ordinary difficulty; (2) constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; (3) the

study of a grammar of moderate completeness; (4) writing from dictation; (5) a continuation of the drill of the previous years in oral and aural training. During this year French should be, as far as possible, the language of the class-room, and by the close of the year students should be able to read intelligently, without translation, ordinary French prose or poetry.

ENGLISH: Three points. The requirements recommended by the Commission of Colleges in New England on Admission Examinations.

Note. No candidate will be accepted in English whose work is notably deficient in point of spelling, punctuation, idiom, or division into paragraphs.

1. Reading.

A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of the examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number — perhaps ten or fifteen — set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books.

With a view to large freedom of choice, the books provided for reading for 1913–14 are arranged in five groups, from which at least ten units are to be selected, two from each group. For any unit of the first group, however, a unit from any other group may be substituted.

Group 1. The *Old Testament*, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the *Odyssey*, with the omission, if desired, of Books

I, II, III, IV, V, XV, XVI, XVII; the *Iliad*, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; the *Aeneid*. (The *Odyssey*, *Iliad*, and *Aeneid* should be read in English translations of recognized literary excellence.)

GROUP 2. Shakespeare: *Merchant of Venice*, *Midsummer-Night's Dream*, *As You Like It*, *Twelfth Night*, *Henry V*, *Julius Caesar*.

GROUP 3. Defoe: *Robinson Crusoe*, Part I; Goldsmith: *Vicar of Wakefield*; Scott: *Ivanhoe* or *Quentin Durward*; Hawthorne: *House of the Seven Gables*; Dickens: *David Copperfield* or *Tale of Two Cities*; Thackeray: *Henry Esmond*; Gaskell: *Cranford*; George Eliot: *Silas Marner*; Stevenson: *Treasure Island*.

GROUP 4. Bunyan: *Pilgrim's Progress*; Addison: *The Sir Roger de Coverley Papers* in *The Spectator*; Franklin: *Autobiography*; Irving: *Sketch Book*; Macaulay: Essays on *Lord Clive* and *Warren Hastings*; Thackeray: *English Humourists*; Lincoln: *Selections*, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman: *Oregon Trail*; Thoreau: *Walden*, or Huxley: *Autobiography* and selections from *Lay Sermons*, including the addresses on *Improving Natural Knowledge*, *A Liberal Education*, and *A Piece of Chalk*; Stevenson: *Inland Voyage* and *Travels with a Donkey*.

GROUP 5. Palgrave: *Golden Treasury* (First Series), Books II and III; Gray: *Elegy in a Country Churchyard*; Goldsmith: *The Deserted Village*; Coleridge: *The Ancient Mariner*; Lowell: *Vision of Sir Launfal*; Scott: *Lady of the Lake*; Byron: *Childe Harold*, Canto IV, and *The Prisoner of Chillon*; Palgrave: *Golden Treasury* (First Series), Book IV; Poe: *The Raven*; Longfellow: *The Courtship of Miles Standish*; Whittier: *Snowbound*; Macaulay: *Lays of Ancient Rome*; Arnold: *Sohrab and Rustum*; Tennyson: *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur*; Browning: *Selections*.

2. Study.

This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. The books set for this part of the examination for 1913–14 are: Shakespeare: *Macbeth;* Milton: *L'Allegro, Il Penseroso,* and *Comus;* Burke: *Speech on Conciliation with America,* or Washington's *Farewell Address* and Webster's *First Bunker Hill Oration;* Macaulay: *Life of Johnson,* or Carlyle: *Essay on Burns.*

HISTORY: Three points, optional.

1. Greek History: *One-half point.*

The history of Greece to the death of Alexander.

2. Roman History: *One-half point.*

The history of Rome through the reigns of the Antonines.

3. Medieval European History: *One-half point.*

To the fall of Constantinople.

4. Modern European History: *One-half point.*

From the fall of Constantinople.

5. English History: *One-half point.*

6. American History: *One-half point.*

Preparation in History will be given credit upon the basis of time devoted to each branch of the subject, rather than upon the amount of ground covered. The amounts indicated are believed to be a fair measure of one-half year's work. The training in History should require comparison and the use of judgment on the pupil's part, rather than the mere exercise of memory. The use of good text-books, collateral reading, practice in writing, and accurate geographical knowledge are essential.

CIVICS: One-half point, optional. A half-year's study in the principles, methods, and usages of American government.

MATHEMATICS: Three points, two and one-half points required.

a. ALGEBRA: *One and one-half points.*

(1) To Quadratics: *One point.*

The four fundamental operations for rational algebraic expressions; factoring, determination of highest common factor and lowest common multiple by factoring; fractions, including complex fractions, ratio and proportion; linear equations, both numerical and literal, containing one or more unknown quantities; problems depending on linear equations; radicals, including the extraction of the square root of polynomials and of numbers; exponents, including the fractional and negative.

(2) Quadratic Equations, Binomial Theorem, and Progressions: *One-half point.*

Simple cases of equations with one or more unknown quantities that can be solved by the methods of linear or quadratic equations. Problems depending upon quadratic equations. The binomial theorem for positive integral exponents. The formulas for the *n*th term and the sum of the terms of arithmetic and geometric progressions, with applications.

b. PLANE GEOMETRY: *One point.*

The usual theorems and constructions of good text-books, including the general properties of plane rectilinear figures; the circle and the measurement of angles; similar polygons; areas; regular polygons and the measurement of the circle. The solution of numerous original exercises, including loci problems. Application to the mensuration of line and plane surfaces.

SOLID GEOMETRY: *One-half point, optional.*

The usual theorems and constructions of good text-books,

including the relations of planes and lines in space; the properties and measurement of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The solution of numerous original exercises, including loci problems. Application to the mensuration of surfaces and solids.

PHYSICS: One point, optional.

The candidate's preparation in Physics should include:

(1) The study of at least one standard text-book, supplemented by the use of many and varied numerical problems, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws in Elementary Physics.

(2) Instruction, by lecture-table demonstrations, upon the general principles involved in the pupil's laboratory investigations.

(3) Individual laboratory work, comprising at least thirty-five exercises. Every candidate must present as a part of the examination a note-book, certified by the teacher, and containing in the candidate's own language a description of his laboratory exercises, the steps, observations, and results of each exercise being carefully recorded. The note-book must afford clear evidence of the pupil's ability to make accurate observations and to draw correct conclusions. Students who have not had the individual laboratory work may receive credit for one-half point.

CHEMISTRY: One point, optional.

The preparation in Chemistry should include individual laboratory work, comprising at least forty exercises selected from a list of sixty or more; instruction by lecture-table demonstrations, to be used mainly as a basis for questioning upon the general principles involved in the pupil's laboratory investigations; the study of at least one standard text-book, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws of Elemen-

tary Chemistry. Students who have not had the individual laboratory work may receive credit for one-half point.

BOTANY: One point, optional.

A half-year's text-book study of the morphology and physiology of seed and seedling, stem, root, leaf, flower, and fruit, together with the preparation of a note-book containing accurate laboratory studies on the morphology of the above organs; and an additional half-year's study on the morphology of cryptogams. One-half point will be credited for either of these courses offered independently.

PHYSIOLOGY: One-half point, optional.

The preparation in Physiology should include a study of the nature of foods and their history in the body; the essential facts of digestion, absorption, circulation, secretion, excretion, and respiration; the motor, nervous, and sensory functions; and the structure of the various organs by which these operations are performed. A note-book with careful outline drawings of the chief structures studied anatomically, together with explanations of these drawings, and the study of a good text-book are essential.

ZOÖLOGY: One-half point, optional.

A half-year's work in general natural history of common animal types; physiology of types studied and comparison of processes of animals and plants; classification of animals into phyla and leading classes, and the great characteristics of these groups; preparation of a note-book containing accurate laboratory studies of types, such as protozoan, sponge, hydra, worm, clam, insect, frog.

PHYSICAL GEOGRAPHY, OR PHYSIOGRAPHY: One-half point, optional.

One-half year in the study of a good modern text-book, together with weekly laboratory and field exercises.

ASTRONOMY: One-half point, optional.

A half-year's work, including the following among the chief topics: *The Celestial Sphere:* designation of the directions of a heavenly body. *The Earth:* its axial rotation; time, latitude, longitude; its orbital revolution; precession, aberration, the seasons, equation of time, the calendar. *The Moon:* its axial rotation, orbital motion, librations, phases, surface features, physical condition; lunar and solar eclipses. *The Sun:* its rotation, physical characteristics, light, and heat. *The Planets:* apparent and real motions, individual characteristics. *The Law of Gravitation:* its control of the solar system; the tides. *Comets and Meteors:* their nature and motions. *The Stars:* designation, classification by constellations; motions, distance, brightness; variables. *Stellar Systems:* clusters, nebulae; the stellar universe, cosmogony.

FREE-HAND DRAWING: One point, optional.

A full year's work in drawing should include simple geometrical plane and solid figures, the simple pieces of machinery, with a fair knowledge of the rules of perspective and light and shade as applied in free-hand sketching. The student should complete at least twenty drawings.

ADMISSION

TO ADVANCED STANDING

A CANDIDATE for admission to advanced standing who comes from an approved institution of collegiate rank may receive credit, without examination, for work done at such institution, if he presents a detailed statement of his previous work. This statement should include a full list of preparatory subjects accepted for admission by the institution previously attended, and also a list of the subjects taken there for which credit

has been attained. A letter of honorable dismissal from the institution last attended must also be presented.

Every other candidate for admission to advanced standing must first satisfy the entrance requirements of the courses which he desires to enter. He may then receive credit for any subject included in the curriculum of that course in which he can pass a satisfactory examination. Such students, not coming from other colleges, will be required to pay a fee of $5 if admitted to the Sophomore class, or $10 if admitted to higher rank.

COURSES OF INSTRUCTION

THE courses in the several departments are arranged in three groups, or courses of study: the Classical Course and the Pedagogical Course, both leading to the degree of Bachelor of Arts, and both open to men and women; and the Scientific Course, leading to the degree of Bachelor of Science, and open to men only. These courses are designed to be equal in difficulty and thoroughness.

CLASSICAL COURSE

THE Classical Course is recommended to students preparing for the ministry, the law, or medicine; also to those intending to become librarians or journalists, and to those who wish to pursue advanced studies in philosophy, literature, or science. It embraces a larger proportion of subjects in language, literature, and philosophy, and is the better course for general culture. Four years of preparatory Latin are required, and at least one year of Latin in College. This course includes that formerly known as the Latin-Scientific. Greek is optional, but is earnestly recommended to those seeking the broadest culture.

The degree of Bachelor of Arts is conferred on those students who have met the requirements of the Classical Course.

SCIENTIFIC COURSE

THE Scientific Course is designed to meet the needs of students who intend to follow some branch of engi-

neering, or who wish to devote special attention to mathematics or some department of natural or physical science. There are men of practical bent of mind who can receive better mental development through a larger proportion of mathematical and scientific studies than is afforded in the Classical Course. At the same time they need thorough discipline in English and Modern Languages, in History and Political Science, and in Psychology. This course is adapted to such discipline, while it also sets the student well on his way toward further progress in technical subjects. Graduates from this course will be admitted to the Junior year of the best technical colleges without examination. Such an arrangement has been concluded with the Massachusetts Institute of Technology. By this means they will receive the general discipline and culture of college in but little more time and with slightly more expense than if they proceeded directly from the academy to the school of engineering. Latin may be presented for admission to this course, but is not required.

The degree of Bachelor of Science is conferred on those students who have met the requirements of the Scientific Course.

PEDAGOGICAL COURSE

The Pedagogical Course is designed for those who intend to enter upon educational work professionally, either as teachers of high school subjects or as educational supervisors. History and Educational Psychology are required in the Freshman year as fundamental to the study of education; the History of Education

in Europe and America is pursued throughout the Sophomore year; Educational Theory and the Elements of General Method are required in the Junior year; and Studies in Special Methods with practical applications in classes complete the required work in the final year. The design of the course is to apply the principles which have been so successful in bringing elementary education to a normal procedure to the problems and practices of the secondary school.

The degree of Bachelor of Arts is conferred on those students who have met the requirements of the Pedagogical Course.

REGISTRATION AND CHOICE OF STUDIES

EVERY student is required to register at the Registrar's office at the beginning of each semester. No student will be received in any class until he has presented to the instructor a card from the Registrar's office admitting him to that class.

In each course and in each year some studies are required and some elective. All students are required to have at least fifteen hours of recitation a week. Students securing admission credits in any study of the curriculum will ordinarily be required to elect another study in its place, either an advanced subject in the same department or a study in some other department of instruction.

There are certain subjects which are required before graduation, but are not required in any particular year. These subjects are, therefore, listed as electives in the outline of studies. Before the degree of Bachelor of Arts is conferred, the candidate must have received credit

for at least two years of French or two years of German, either for admission or in College; one year of History is required in College, and in the Classical and Pedagogical Courses one year of Natural Science. Before the degree of Bachelor of Science is conferred, the candidate must have received credit for at least two years of German and two years of French, either for admission or in College; one year each of any two of the subjects, Physics, Chemistry, and Biology, is required in College. As a substitute for the second year of required Mathematics, a student may offer for the degree of Bachelor of Science two years of Biology, Chemistry, Geology, Physics, or Political Science.

A student may elect any study offered to a class below his own, and not already taken by him, if such choice is approved by his adviser and the instructor in that department.

Each completed course shall count toward a degree, the degree being earned when 120 credits have been attained. A credit is understood as one hour a week for one semester, and 120 credits are secured regularly by fifteen hours a week each semester for four years.

More than fifteen hours of recitation a week may be taken under the following conditions:

1. A student who presents to the Faculty during the first semester of the Freshman year satisfactory evidence of attainments and ability may be considered a candidate for the Bachelor's degree in three years. Such a student may take thirteen courses in each of his first two years, and fourteen in his third year.

2. Conditioned students or students compelled to repeat a course may take six courses in any semester, provided that no condition or obligation to repeat has

been incurred in the semester immediately preceding.

3. Any student not affected by the two preceding rules and desiring to take six courses in any semester must have attained in the studies of the preceding semester an average of 75 per cent. Freshmen may take one study in addition to the regular five for the purpose of making up an entrance condition.

When a student has more than fifteen hours in any semester, his rank for the semester shall be determined by the fifteen hours in which he receives the highest marks, except that marks on all required subjects shall be included.

A Freshman admitted without conditions may request of the Registrar, at the time of registration, an examination for college credit in any subject of the Freshman year. If such examination is passed with a grade of 75 per cent, credit will be allowed for the course toward any degree, as though the subject had been taken regularly in College. A student passing off any subject or subjects in this manner will be required to make up fifteen hours of recitation a week from other studies offered to his class.

SUGGESTED ELECTIVE GROUPS

EACH of the courses, Classical, Pedagogical, Scientific, allows students to shape their college work toward some definite professional or vocational end. This can be done only through a wise choice of elective studies. Middlebury College offers to every student the personal advice and assistance of the President and some member of the Faculty in laying out a purposeful plan of work. Certain groups of elective studies have been

formed, as hereafter described, for the benefit of students who have definite aims. In connection with each one of these groups of study a member of the Faculty is appointed by the President to act as an adviser to students wishing to specialize in that group. At the beginning of his college course every student shall consult the President, who will refer him to the adviser in the group best suited to his needs. Students in any group should elect as fully as possible from the courses offered in that group. For the student whose purpose is to secure in College, without reference to subsequent vocation, a broad, general foundation, the entire elective list is of course open, for such selection as shall seem wisest to himself and his advisers.

The coördination of electives here suggested, while encouraging definiteness of purpose, is in no way hostile to the claims of liberal training. In any group the electives indicated as advisable are not more than half the number that are necessary for securing a degree, and the student who adheres most closely to the suggestions that are offered need not fail of the general culture that it is the special purpose of the College to impart. Specific mention, therefore, has not been made of many courses offered, in the classical and other departments, which may profitably be included in any group.

AGRICULTURE.

Elementary Biology, General Botany, Fungi and Lichens, Bacteriology, General Zoölogy, Physiology of Plants, Forestry, Descriptive Chemistry, Analytical Chemistry, Organic Chemistry, Agricultural Chemistry, Mineralogy, Economic Physiography, Agricultural Geology, Surveying and Plotting, Sociology, Contracts and Commercial Law.

BUSINESS.

French or German, Political Economy, American Colonial History, American History from 1783, Constitutional History of the United States, Sociology, Contracts and Commercial Law, Descriptive Chemistry, General Laboratory Chemistry, Elementary Biology, General Botany, General Physics, General Zoölogy. See also Mineral Industry.

EDUCATION.

Students of Education, if intending to enter teaching or supervision as a profession, will take the Pedagogical Course. Others may elect Educational Psychology, History of Education in Europe, American Education, Secondary Education, and departmental courses in the subjects which they intend to teach. See Departments of Instruction, Pedagogy.

ENGINEERING.

Admission to Junior standing in the best technological institutions necessitates having credits in Mechanical Drawing, Descriptive Geometry, French and German, Inorganic Chemistry, Calculus. Suggested electives are: Surveying and Plotting, Differential Calculus, Mechanical Drawing and Descriptive Geometry, Integral Calculus, Astronomy, French (two years), German (two years), Physical Measurements, Descriptive Chemistry, Qualitative Analysis, Mineralogy.

JOURNALISM.

Paragraph Writing, Victorian Prose, The English Novel, Medieval European History, Modern European History, American History from 1783, Constitutional History of England, Constitutional History of the United States, Political Economy, Sociology, Constitutional Law, French, German.

LAW.

Medieval European History, Modern European History,

American Colonial History, American History from 1783, Constitutional History of England, Constitutional History of the United States, Argumentation and Debate, Political Economy, Elementary Law, Constitutional Law, Contracts and Commercial Law, Roman Law, Elements of American Law, Sociology.

Medicine.

Elementary Biology, General Botany, Bacteriology, General Zoölogy, Comparative Anatomy, Human Anatomy, Vertebrate Embryology, General Physics, Descriptive Chemistry, Qualitative Analysis, Gravimetric Analysis, Advanced Quantitative Analysis, Organic Chemistry, Sanitary Chemistry, French, German.

Mineral Industry.

Descriptive Chemistry, Analytical Chemistry, Mineralogy, General Geology, Economic Geology of Vermont, Economic Physiography, Surveying and Plotting, Mechanical Drawing, Astronomy, Contracts and Commercial Law.

Theology.

Argumentation and Debate, Plato and Xenophon, A Study in Roman Philosophy, History of Philosophy and Ethics, Kant, Systematic Ethics, Contemporary Epistemology, Metaphysics, Studies in the Philosophy of Religion, History of Medieval Europe, American History from 1783, Political Economy, Sociology, Elementary Biology, General Zoölogy, General Geology, Astronomy, German.

OUTLINE OF STUDIES*

FRESHMAN YEAR

FIRST SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 1	English 1	English 1
Latin 1	History 1	Mathematics 1
Mathematics 1	Latin 1	
Elective (any two)	*Elective (any two)*	*Elective (any three)*
Botany 1, 3	Botany 1, 3	Botany 1, 3
Chemistry 1	Chemistry 1	Chemistry 1
French	French	French
German	German	German
Greek 1, 13	Greek 1, 13	Greek 1, 13
History 1	Mathematics 1	History 1
Zoölogy 1, 9	Physics 1	Physics 1
	Zoölogy 1, 9	Zoölogy 1, 9

SECOND SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 2	English 2	English 2
Latin 2	Latin 2	Mathematics 2
Mathematics 2	Pedagogy 2	
Elective (any two)	*Elective (any two)*	*Elective (any three)*
Botany 2, 4	Botany 2, 4	Botany 2, 4
Chemistry 2	Chemistry 2	Chemistry 2
French	French	French
German	German	German
Greek 2, 14	Greek 2, 14	Greek 2, 14
History 2	History 2	History 2
Zoölogy 2, 10	Physics 2	Physics 2
	Zoölogy 2, 10	Zoölogy 2, 10

* See, on pp. 32, 33, the paragraph as to studies required at some time before graduation.

SOPHOMORE YEAR

FIRST SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 7	English 7 Pedagogy 3	English 7
Elective (*any four*)	*Elective* (*any three*)	*Elective* (*any four*)
Botany 1, 3, 5	Botany 1, 3, 5	Botany 1, 3, 5
Chemistry 1, 3	Chemistry 1, 3	Chemistry 1, 3
Engineering 1	Engineering 1	Engineering 1
English 3	English 3	English 3
French	French	French
Geology 1, 7	Geology 1, 7	Geology 1, 7
German	German	German
Greek 3, 11, 13	Greek 3, 11, 13	Greek 3, 11, 13
History 3 or 5	History 3 or 5	History 3 or 5
Latin 3	Latin 3	Mathematics 3
Mathematics 3	Mathematics 3	Pedagogy 3
Pedagogy 3	Philosophy 1, 3, 5	Philosophy 1, 3, 5
Philosophy 1, 3, 5	Physics 3 or 5, 7	Physics 3 or 5, 7
Physics 1	Political Science 1, 5, 7	Political Science 1, 5, 7
Political Science 1, 5, 7	Zoölogy 1, 3, 9	Zoölogy 1, 3, 9
Zoölogy 1, 3, 9		

SECOND SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
Philosophy 2	Pedagogy 4 Philosophy 2	Philosophy 2
Elective (*any four*)	*Elective* (*any three*)	*Elective* (*any four*)
Botany 2, 4, 6, 8	Botany 2, 4, 6, 8	Botany 2, 4, 6, 8
Chemistry 2, 4	Chemistry 2, 4	Chemistry 2, 4
Engineering 2	Engineering 2	Engineering 2
English 4	English 4	English 4
French	French	French
Geology 2, 6	Geology 2, 6	Geology 2, 6

SECOND SEMESTER (CONTINUED)

German
Greek 4, 10, 14
History 4 or 6
Latin 4
Mathematics 4
Pedagogy 2, 4
Philosophy 4, 6
Physics 2
Political Science, 4, 6, 8, 2 or 14, 12 or 16
Zoölogy 2, 10, 12

German
Greek 4, 10, 14
History 4 or 6
Latin 4
Mathematics 4
Philosophy 4, 6
Physics 8
Political Science 4, 6, 8, 2 or 14, 12 or 16
Zoölogy 2, 10, 12

German
Greek 4, 10, 14
History 4 or 6
Mathematics 4
Pedagogy 2, 4
Philosophy 4, 6
Physics 8
Political Science 4, 6, 8, 2 or 14, 12 or 16
Zoölogy 2, 10, 12

JUNIOR YEAR

FIRST SEMESTER

CLASSICAL AND SCIENTIFIC

Required

Elective
(*any five*)

Botany 1, 3, 5
Chemistry 1, 3, 5, 7, 11
Engineering 3, 7
English 3, 5, 11, 13
French
Geology 1, 3, 5, 7
German
Greek 5 or 7, 9, 11, 13
History 3 or 5, 7 or 9, 11
Latin 5 or 7, 9, 13, 15
Mathematics 5
Pedagogy 1, 3, 5, 7
Philosophy 1, 3, 5, 11
Physics 3 or 5, 7
Political Science 1, 3, 5, 5a, 7, 9 or 11
Zoölogy 1, 3, 5, 7, 9

PEDAGOGICAL

Required

Pedagogy 5

Elective
(*any four*)

Botany 1, 3, 5
Chemistry 1, 3, 5, 7, 11
Engineering 3, 7
English 3, 5, 11, 13
French
Geology 1, 3, 5, 7
German
Greek 5 or 7, 9, 11, 13
History 3 or 5, 7 or 9, 11
Latin 5 or 7, 9, 13, 15
Mathematics 5
Pedagogy 1, 7
Philosophy 1, 3, 5, 11
Physics 3 or 5, 7
Political Science 1, 3, 5, 5a, 7, 9 or 11
Zoölogy 1, 3, 5, 7, 9

SECOND SEMESTER

CLASSICAL AND SCIENTIFIC

Required

Elective
(*any five*)

Botany 2, 4, 6, 8
Chemistry 2, 4, 6, 8, 12
Engineering 4, 8
English 4, 6
French
Geology 2, 4, 6
German
Greek 6 or 8, 10, 14
History 4 or 6, 8 or 10, 12, 14
Latin 6, 8, 10, 12
Mathematics 6
Pedagogy 2, 4, 6, 8
Philosophy 4, 6
Physics 8, 10
Political Science 2 or 14, 6, 6a, 8, 12 or 16
Zoölogy 2, 6, 8, 10, 12

PEDAGOGICAL

Required

Pedagogy 6

Elective
(*any four*)

Botany 2, 4, 6, 8
Chemistry 2, 4, 6, 8, 12
Engineering 4, 8
English 4, 6
French
Geology 2, 4, 6
German
Greek 6 or 8, 10, 14
History 4 or 6, 8 or 10, 12, 14
Latin 6, 8, 10, 12
Mathematics 6
Pedagogy 8
Philosophy 4, 6
Physics 8, 10
Political Science 2 or 14, 6, 6a, 8, 12 or 16
Zoölogy 2, 6, 8, 10, 12

SENIOR YEAR

FIRST SEMESTER

CLASSICAL AND SCIENTIFIC

Required

English 9

Elective
(*any four*)

Botany 1, 3, 5
Chemistry 1, 3, 5, 7, 11
Engineering 5, 7
English 3, 5, 11, 13
French
Geology 1, 3, 5, 7
German
Greek 5 or 7, 9, 11, 13
History 7 or 9, 11

PEDAGOGICAL

Required

English 9

Elective
(*any four*)

Botany 1, 3, 5
Chemistry 1, 3, 5, 7, 11
Engineering 5, 7
English 3, 5, 11, 13
French
Geology 1, 3, 5, 7
German
Greek 5 or 7, 9, 11, 13
History 7 or 9, 11

FIRST SEMESTER (CONTINUED)

Latin 5 or 7, 9, 13, 15
Mathematics 5, 7, 9
Pedagogy 1, 3, 5, 7
Philosophy 1, 3, 5, 11
Physics 3 or 5, 7
Political Science 1, 3, 5a, 9 or 11
Zoölogy 1, 3, 5, 7, 9

Latin 5 or 7, 9, 13, 15
Mathematics 5, 7, 9
Pedagogy 1, 7, 9
Philosophy 1, 3, 5, 11
Physics 3 or 5, 7
Political Science 1, 3, 5a, 9 or 11
Zoölogy 1, 3, 5, 7, 9

SECOND SEMESTER

CLASSICAL AND SCIENTIFIC

Required

Political Science 10

Elective
(*any four*)

Botany 2, 4, 6, 8
Chemistry 2, 4, 6, 8, 12
Engineering 6, 8
English 4, 6
French
Geology 2, 4, 6
German
Greek 6 or 8, 10, 14
History 8 or 10, 12, 14
Latin 6, 8, 10, 12
Mathematics 6, 8, 10
Pedagogy 2, 4, 6, 8
Philosophy 4, 6
Physics 8, 10
Political Science 2 or 14, 6a, 12 or 16
Zoölogy 2, 4, 6, 8, 10, 12

PEDAGOGICAL

Required

Political Science 10

Elective
(*any four*)

Botany 2, 4, 6, 8
Chemistry 2, 4, 6, 8, 12
Engineering 6, 8
English 4, 6
French
Geology 2, 4, 6
German
Greek 6 or 8, 10, 14
History 8 or 10, 12, 14
Latin 6, 8, 10, 12
Mathematics 6, 8, 10
Pedagogy 8, 10
Philosophy 4, 6
Physics 8, 10
Political Science, 2 or 14, 6a, 12 or 16
Zoölogy 2, 4, 6, 8, 10, 12

DEPARTMENTS OF INSTRUCTION

I. BIOLOGY

1. Plant Biology (*Elementary Botany*)

An introductory course giving a general survey of the plant world from the simplest organisms up to the flowering plants. Lectures and recitations on protoplasm, the cell, cell structure, and the morphology, physiology, and reproduction of plants, and the relation of fungi and bacteria to fermentation, putrefaction, and disease. The laboratory work consists in learning to use the compound microscope and make preparations and studies of simple forms of plant life.

First semester. Elective for all classes. Laboratory fee, $5. Professor Burt.

2. Animal Biology (*Elementary Zoölogy*)

This course serves as an introduction to the facts of Biology as expressed in animal life. The work includes a consideration of the fundamental differences between plants and animals; the cell as a type of living matter and as a unit of structure; together with a study of evolutionary law as it is illustrated by the progressive complexity of structure and function in animal forms. A series of typical animals, illustrating the different aspects of the subject, are examined in the laboratory. This course should be chosen by students who are planning to do more than the work of a single semester in Zoölogy.

Second semester. Elective for all classes. Laboratory fee, $5. Assistant Professor Lambert.

These two courses in Botany and Zoölogy are designed for those who wish to know something of the elementary prin-

ciples and aims of these sciences, to lay a broad foundation for advanced scientific work, to teach Natural Science, or to study Medicine, Agriculture, or Forestry.

BOTANY

Professor BURT
Mr. DAVIS

1. ELEMENTARY BOTANY

For description of this course, see Biology 1, Plant Biology.

2. GENERAL BOTANY OF FLOWERING PLANTS

Laboratory work and recitations on seed, shoot, root, flower, and fruit, and on the more elementary features of germination, nutrition, pollination, dissemination, and plant breeding. Propagation and care of plants. Determination of plants and the preparation of herbarium specimens.

Second semester. Elective for all classes. Those who have had Botany in high school may elect 1 *instead of* 2. *Laboratory fee*, $2. Professor BURT.

3. FUNGI AND LICHENS

A course in which the higher groups of economic fungi and the myxomycetes and lichens are studied in detail. Edible and poisonous fungi, fungi destructive to timber and trees; lectures on their structure, life history, and classification. Laboratory work on external morphology, microscopic structure, and results produced by these plants; determination of the genera and frequently of the species studied. Unusual advantages for this course are afforded by the proximity of the College to forests.

First semester. Elective for all classes. Botany 1 *gives good preparation for this course. Laboratory fee*, $5. Professor BURT.

4. Bacteriology

A course for general education on bacteria, germs, or microbes in their relation to the individual, the household, and the community. Lectures on the morphology and life history of bacteria, culture methods, drinking water, contamination of food, beneficial bacteria, some pathogenic species and the diseases they cause, infection, and immunity. Laboratory work in the preparation of culture media, destruction of bacteria, isolation of species, and study of pure cultures. This course affords a good foundation for the special work on pathogenic bacteria in medical colleges.

Second semester. Elective for all classes. Botany 1 *gives good preparation for this course. Laboratory fee*, $5. Professor Burt.

5. Histology of Plants

Recitations and laboratory work on external morphology of plants, the cell, cell fusion, tissue systems, structure of woods, the development of the secondary or adult tissues from embryonic tissue; technique of imbedding, sectioning, and staining for study of nuclear and cell structure.

First semester. Elective after 2 *or Botany in high school. Laboratory fee*, $5. Professor Burt.

6. Physiology of Plants

Continuation of 5. Having studied in 5 the anatomy of the plant body, the student here takes up in recitation, laboratory work, and experiments the functions of the several tissues and organs of the living plant. These studies cover stability of the plant body, nutrition, respiration, starch and sugar formation, work of plant ferments, growth, phenomena of movement, and reproduction.

Second semester. Elective after 5. *Laboratory fee*, $5. Professor Burt.

8. Forestry

A course treating especially of the management of wood lots

and forests for New England. Lectures on the scope and function of forestry, utility of forests, most valuable trees and the tree weeds of New England, improvement of the character and composition of the forest, establishing woods by seeding, transplanting, and coppice growth, utilization of waste land for tree crops. Practical exercises in recognizing the kinds of forest trees, planting tree seeds and transplanting seedlings, principles of thinning woods, measurement of logs and timber, and methods of computing the commercial value of forests and wood lots.

Second semester; two hours and one half-day a week. Elective for those who have taken 2 *or its equivalent. Students giving special attention to Forestry should take, in addition to this,* Botany 5 *and* 6 *for structure of timber and growth of trees, and* 3 *for destruction of timber by fungi and diseases of trees. These courses provide two years of continuous advanced work in Forestry.* Professor BURT.

ZOÖLOGY

Assistant Professor LAMBERT
Assistant Professor LYFORD

1. GENERAL ZOÖLOGY

General Zoölogy is intended to provide students, who are preparing to teach, with as broad a knowledge of the whole field of Zoölogy as can be obtained in a single course. It includes a survey of the invertebrate and vertebrate phyla, their forms, classification, and distribution. The economic importance of certain groups is considered, as well as the important biological laws of growth, variation, and inheritance. Types representing the main divisions of the animal kingdom are examined in the laboratory.

First semester. Elective for all classes. Laboratory fee, $5. Assistant Professor LAMBERT.

2. Elementary Zoölogy

For description of this course, see Biology 2, Animal Biology.

3. Invertebrate Zoölogy

A systematic study of the invertebrate animals. This course includes a close examination of typical representatives of the larger subdivisions of the invertebrate animals from the viewpoint of classification. Form as a means of adaptation; structure in its relation to function; variation, natural selection, and heredity as principles of evolutionary study, are discussed in the lectures. Material illustrating the principles under discussion is examined in the laboratory.

First semester. Elective for students who have had 1 *or* 2. *Laboratory fee*, $5. Assistant Professor Lambert.

4. Vertebrate Zoölogy

A systematic study of the vertebrate animals based upon a careful examination of form and structure. Attention is given in this course to the development of the animal body as illustrated by the increasing complexity of the bony structures and other organs. Analogous and homologous organs, convergent and divergent development, natural selection, heredity, and distribution, as these principles relate to the vertebrate animals, are discussed in the lectures. Types illustrating progress, both in structure and function, are examined in the laboratory.

Second semester. Elective for students who have had 3. *Laboratory fee*, $5. Assistant Professor Lyford. (To be given in 1913–14.)

5, 6. Advanced Physiology

This course is planned to meet the needs of those who intend to do advanced work in Home Economics, to teach Biology, or to take up the study of Medicine. The course is divided into two parts, and extends through the entire year.

(*a*) Anatomy and Histology. The first part of the course includes a careful study of the gross and minute structure of the mammalian body, with constant reference to human anatomy. The work consists of lectures, demonstrations, recitations, and laboratory exercises. Some attention is given to methods of preparing animal tissues for microscopical examination, and each student is required to present a certain number of such preparations made in the laboratory. The body of a typical mammal is dissected.

(*b*) Function. The second part of the course deals with an experimental study of function, including the physiology of nerve and muscle, the chemistry of digestion and nutrition, thermal phenomena, and the mechanics of respiration, circulation, excretion, etc.

First and second semesters. Elective for students who have had the elementary courses in Zoölogy and the general courses in Chemistry and Physics. Laboratory fee, $5 for each semester. Assistant Professor LYFORD.

7. VERTEBRATE EMBRYOLOGY

A careful investigation of the phenomena of development. The work includes the discussion, and laboratory study, of the processes of maturation, fertilization, and division of the cell; the origin of the germ layers, and their relation to the various organic systems of the body. The frog, chick, and a mammal are used as types for laboratory study.

First semester. Elective for students who have had 3 and 4, or 5 and 6. Laboratory fee, $5. Assistant Professor LYFORD.

8. ZOÖLOGICAL SEMINAR

The purpose of the Seminar is to acquaint students, through assigned readings, with the literature of Evolution. The work consists of reports and discussions of the principles of evolutionary theory, including Natural Selection, Weissmannism, Mendelianism, and their more recent modifications. Stu-

dents meet one hour each week for discussion and presentation of reports; but the library assignments occupy enough time to render the work the equivalent of a three-hour course.

Second semester. Elective for Juniors and Seniors. Assistant Professor LAMBERT.

9, 10. ELEMENTARY PHYSIOLOGY AND HYGIENE

An introduction to the fundamental facts of physiology and the laws of health, based on the physiological activities of the body.

(*a*) The first part of the course includes discussions and demonstrations of the structure of the body, the relations of the various organic systems to bodily activity, and the functions of the different organs.

(*b*) The second part of the course is given to the consideration of the causes and conditions of disease, the laws of health, and the general care of the body.

First and second semesters. Elective for all classes. Assistant Professor LAMBERT.

12. ENTOMOLOGY

A study of the structure of insects as applied in the principles of classification; the different groups, with some of the more important economic insects in each group, including their life histories, habits, and methods of control.

Second semester. Elective after Freshman year. Assistant Professor LAMBERT.

II. CHEMISTRY

Professor McGilton
Mr. Voter

1. Descriptive Chemistry

Non-metallic elements and their principal compounds, and their relation to the metals. Acids, bases, and salts are studied carefully and their formation illustrated. Electrolytic dissociation, ionisation, Faraday's laws, and the theory of solution are discussed at length and illustrated. Numerous chemical problems involving atomic and molecular weights, percentage composition, etc., are solved by the student. One of the main objects of the course is to give the student a broad appreciation of the importance of chemical processes in the structure of matter and the relations of these processes to life. Lectures and recitations.

First semester. Elective for all classes. Laboratory fee, $5. Professor McGilton.

2. General Laboratory Chemistry

Lectures, recitations, and laboratory work on general descriptive chemistry. By means of the study of the preceding semester the student is able to prepare the most important chemical compounds at his own desk. Full notes are kept by him of each step taken and each observation made, and frequent reports are presented to the instructor. The student has constantly brought to his attention, by lectures and the use of reference books, the sources and industrial value of the substances which he handles.

Second semester; three hours a week, or three periods a week in the laboratory. Elective in the same year for students who have completed 1. *Laboratory fee*, $5. Professor McGilton.

3, 4. Qualitative Analysis

Special attention is given to the analytical reactions of each base and to practice in the separation of metals from each other in unknown liquid and solid mixtures. The characteristic reactions of acid radicles are studied and the complete constitution of unknown bodies is determined. Preliminary tests and blow-pipe analysis are a part of the work.

First and second semesters. Open to all students who have completed 2. *Laboratory fee, $5 for each semester.* Professor McGilton.

5, 6. Quantitative Analysis, Gravimetric and Volumetric

Lectures and laboratory work on analytical methods of general application to quantitative chemistry. The use and manipulation of the chemical balance, general laboratory practice, accuracy of measurement, and stoichiometric problems especially emphasized. The first semester's work consists of the usual gravimetric analyses and the complete analysis of a carbonate rock. The second semester's work consists of the volumetric analyses, involving the making of standard solutions, standardization of glass apparatus, uses of various indicators, and rapid analysis of ores.

First and second semesters. Elective for those who have taken 1, 2, *and* 3. *Laboratory fee, $5 for each semester.* Mr. Voter.

7, 8. Industrial and Sanitary Chemistry

Lectures on the chemical processes involved in the large-scale manufacture of gas, fuels, paper, glass and ceramics, fertilizers, soda, sulphuric acid, dyes, paints, soap, coal-tar products, fermentation products, sugar, disinfectants, antiseptics, and other commercial products.

First and second semesters. Elective for those who have taken 1, 2, *and* 3. *Laboratory fee, $3 for each semester.* Mr. Voter.

9. Agricultural Chemistry

Lectures and laboratory work on the analysis of soils, fertilizers, and feeding materials. The effect of acid-forming and base-forming elements in soils and fertilizers. The composition of foods and the principle of balanced rations. The analysis of dairy products; the determination of the per cent of ash, water, sugar, and total solids in milk, butter, and cheese. Determination of the per cent of fat by both the Babcock method and the Adams-Soxhlet continuous extraction method. Factors which influence the sanitary conditions of dairying. The effects of bacteria in milk and its products. The principles of nitrification and the influence of bacteria in soils.

First semester. Elective for those who have taken 1, 2, 3, *and* 4, *and have taken or are taking* 7. *Laboratory fee*, $5. Mr. Voter. (To be given in 1914–15.)

11, 12. Organic Chemistry

Lectures on the study of the genetic relationships of the more important classes of carbon compounds and their bearing upon chemical and agricultural industries. The subject, as far as possible, is treated from a practical point of view. Composition, purification, classification, constitution or structure of organic compounds. Typical class reactions with various reagents. Study of the paraffines, alcohols, ethers, fats, sugars, and coal tar. Changes occuring in the metabolism and katabolism of the human body.

First and second semesters. Elective for those who have taken 1, 2, *and* 3. *Laboratory fee*, $3 *for each semester*. Mr. Voter.

14. Elementary Theoretical and Physical Chemistry

The course includes a treatment of the historical development of chemical theory and stoichiometry. Lectures.

Second semester. Elective for those who have taken 1 *and* 2. Mr. Voter. (To be given in 1914–15.)

III. ENGINEERING

Assistant Professor SWETT

1. MECHANICAL DRAWING

Drawing instruments and their use; mechanical drawing from objects; geometrical problems; lettering, dimensioning, tinting, tracing, and the making of blue prints; orthographic projection; isometric drawing, intersection and development of surfaces.

First semester; three two-hour periods a week. Elective for Sophomores. Instruments furnished; fee, $1.

2. DESCRIPTIVE GEOMETRY

Representation of the point, line, and plane with problems relating to them; representation of plane surfaces, single curved surfaces, and surfaces of revolution; intersection of surfaces by lines, by planes, and by other surfaces; development of surfaces. A course particularly for those students intending to obtain advanced standing in some school of engineering.

Second semester; three two-hour periods a week. Elective for students who have completed 1. *Instruments furnished; fee,* $1.

3, 4. SURVEYING AND PLOTTING

This course emphasizes field work, actual practice with the various surveying instruments, work in the drawing-room, including the computations which arise in the work of the surveyor, also the making of scale drawings, profiles, and contour maps from notes taken by the students in the field. The use of the chain, tape, compass, and transit is taught during the first semester, followed by the various forms of leveling instruments during the second semester.

First and second semesters; three periods a week. Elective for students who have completed 1 *and Mathematics* 3. *Fee for instruments,* $1 *for each semester.*

5. Advanced Surveying

Topography and topographical drawing; use of the stadia, plane table, and barometer; railroad curves; the construction of stadia diagrams, and the making of topographic maps from surveys made with the camera.

First semester; three periods a week. Elective for those who have completed 3 *and* 4. *Fee for instruments*, $1.

6. Applied Mechanics

Statics, stresses in frames, dynamics. The general methods and applications of statics, including the determination of reactions, stresses in frames; of distributed forces, center of gravity; of moment of inertia, radius of gyration of plane areas and solids; of kinematics and dynamics, including the equations for uniform and varying rectilinear and curvilinear motion, centrifugal force, unresisted projectile, pendulum, harmonic motion, rotation, combined rotation and translation, momentum and angular momentum, center of percussion, impact, work, power, and kinetic energy.

Second semester. Elective for those who have had Mathematics 5 *and* 6.

7, 8. Municipal Engineering

Materials of Engineering

The physical and mechanical properties of the various materials used by the engineer, such as stone, brick, cement, concrete, wood, iron, and steel; the manufacture of iron, steel, and cement.

Highway Construction

The economies, location, construction, and maintenance of country roads; city pavements, dust prevention, and preservation of macadam roads; roads and pavements in foreign countries.

Elementary Hydraulics, Water Supply

Including the flow of water through pipes, the location and construction of reservoirs, the location of hydrants and fire protection, the prevention of water contamination.

Sanitary Engineering

The study of the design and construction of sewerage systems; works attending the various methods of sewage disposal; garbage disposal.

Sanitary Science and Public Health

Lectures on health and disease, the germ theory, dust and its dangers, infection and contagion, drinking water and sewage as vehicles of disease, the purification of water and sewage.

First and second semesters. Elective for Juniors and Seniors.

IV. ENGLISH

Professor WRIGHT
Assistant Professor CADY

1. COMPOSITION AND RHETORIC

The work is divided between practical composition and a study of the art on the basis of its principles. Weekly compositions are required, which are progressive throughout the year.

First semester. Required of all Freshmen. Assistant Professor CADY.

2. COMPOSITION AND RHETORIC

A continuation of the work of 1.

Second semester. Required of all Freshmen. Assistant Professor CADY.

3. Exposition

A study of the Essay, based on Bronson's *English Essays*. Reading and analysis of the essays, with drill in writing.

First semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady.

4. Argumentation

The theory of argumentation; practice in brief-making and in the construction and delivery of argumentative speeches. Extended analysis of typical speeches. Frequent delivery of prepared addresses before the class is required of all who take the course.

Second semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady.

5. Shakespeare

This course is an intensive study, through the medium of the plays, of the development of Shakespeare, the man and the dramatic artist.

First semester. Elective for Juniors and Seniors. Assistant Professor Cady.

6. The English Drama to 1642

A study of the sources of the Elizabethan drama, its characteristics at its height, and the causes which led to its decline. Based upon the reading of the works of dramatists other than Shakespeare, upon lectures, and upon extensive reading in the Library. While 6 is planned as a possible continuation of 5, either may be elected without the other.

Second semester. Elective for Juniors and Seniors. Assistant Professor Cady.

7. History of English Literature

A rapid treatment of the successive phases of English literary development. The leading facts of English history are also

discussed whenever they are necessary to an adequate understanding of the subject.

First semester. Required of all Sophomores. Professor WRIGHT.

9. THE PRINCIPLES OF LITERARY CRITICISM

A detailed study of the nature of literature and of its intellectual, emotional, and formal elements.

First semester. Required of all Seniors. Professor WRIGHT.

11. STUDIES IN ENGLISH LITERATURE

A course given to a detailed investigation of individual men of letters, of periods, or of literary forms other than the Drama and the Essay. The themes will vary from year to year as circumstances may suggest; the theme for 1912–13 is Milton and his works.

First semester. Elective for Juniors and Seniors. Professor WRIGHT.

13. AMERICAN LITERATURE

Beginning with 1913–14, American prose will be studied one year, and American poetry the next.

First semester. Elective for Juniors and Seniors. Professor WRIGHT.

V. FRENCH

Assistant Professor ROBINSON

1. BEGINNERS' FRENCH

Elements of the grammar; drill in pronunciation; reading and translation of easy prose; study of the irregular verbs.

First semester.

2. BEGINNERS' FRENCH

Grammar completed; dictation exercises; easy prose con-

tinued; irregular verbs completed; free reproduction of passages read.

Second semester.

3, 4. Intermediate French

Thorough review of grammar; composition, and translation from English into French; sight translation and free reproduction. Much emphasis is laid upon the reading, in French, of easy texts; retroversion.

First and second semesters. Open to students who have had 1 *and* 2, *or their equivalent.*

5, 6. Introduction to French Literature

History of the development of the French language and literature from the Oaths of Strassburg to the twentieth century. This course is based on a manual of French literature, with lectures, library reading, and careful study of representative works of the most celebrated authors.

First and second semesters. Open to students who have had two years of French.

7, 8. French Literature in the Seventeenth Century

The classical drama—Corneille, Molière, Racine; the poetry of La Fontaine and Boileau; French prose from Descartes to St. Simon.

First and second semesters. Open to students who have had 5 *and* 6.

9, 10. French Literature in the Eighteenth Century

Montesquieu, Voltaire; Diderot and the Encyclopedists; the Revolution and its bearing on literature; Rousseau and his philosophy; Le Sage, Marivaux, Beaumarchais.

First and second semesters. Open to students who have had 5 *and* 6. (To be given in 1913–14.)

11, 12. French Literature in the Nineteenth Century

The Romanticists; Realism and Naturalism; literary criticism—Chateaubriand, Sainte-Beuve, Taine; the modern drama.

First and second semesters. Open to students who have had 5 *and* 6. (To be given in 1914–15.)

13, 14. An Advanced Course in French Syntax

This course, for students planning to teach French, will consist of a critical study of the principles of syntax and the best method of presenting these principles.

First and second semesters. Open to students who have had three years of French.

15, 16. Scientific French

This course is especially designed for students planning to attend technical schools, or who wish to familiarize themselves with the scientific vocabulary for purposes of research work. A course in reading and composition.

First and second semesters. Open to students who have had two years of French. (To be given in 1913–14.)

Note. In the Department of French, students of any class will be assigned to those courses for which, in the judgment of the instructor, they are best fitted.

VI. GEOLOGY

Assistant Professor LYFORD

1. General Geology

Dynamical Geology: a study of the atmospheric, aqueous, igneous, and organic agencies acting on and modifying the earth's surface. Structural Geology: the rocks of the earth; the structure of rock masses; stratification; dislocation and metamorphism of strata.

First semester. Elective for Sophomores, Juniors, and Seniors.

2. General Geology

Stratigraphic and Historical Geology and Elementary Paleontology; the history of the evolution of the earth and of the organic kingdom. Some laboratory and field work are features of both 1 and 2.

Second semester. Elective for those who have had 1.

3. Mineralogy and Petrology

Elementary descriptive and determinative mineralogy; blowpipe analysis. The microscopical examination of mineral and rock sections. Petrology, or the study of the earth's crust; texture, composition, origin, classification, and occurrence of the various classes of rocks.

First semester; two class exercises and one period of laboratory work each week. Elective for students who have had one year's work in Chemistry or Geology. Laboratory fee, $5.

4. Economic Geology of Vermont

The principles of economic geology; the origin and nature of ore deposits, mineral veins, and non-metallic products. A general survey of the economic geology of Vermont, including a discussion of the marble, granite, and slate indus-

tries, and of the production of metals. The soils of Vermont. The statistics of the production of Vermont's mineral resources.

Second semester. Elective for properly qualified students.

5. Systematic Geology

An advanced course embracing a detailed study of a few special topics in American geology. Use is made not only of the department library facilities, but of the museum and field as well.

First semester. Elective for students who have had 2.

6. Economic Physiography and Meteorology

Natural factors limiting the extent of industry and population. Conservation of the land and its resources, including water power and ground water. The forest as a physiographic unit. A study of nature as a system of forces in dynamic equilibrium. This course should be elected by students preparing to teach advanced geography in high schools.

Second semester. Elective for Sophomores, Juniors, and Seniors.

7, 8. Agricultural and Chemical Geology

The soil; its origin and composition. The influence of soils upon agricultural pursuits; effects of methods of treatment upon texture; special qualities possessed by different types of soil; mechanical analysis, and temperature properties of soils; movement and composition of soil moisture; organic constituents of soils and their effects. Theory of soil fertility.

First and second semesters. Elective for properly qualified students. Laboratory fee, $5.

VII. GERMAN

Assistant Professor SKILLINGS

1, 2. BEGINNERS' GERMAN

Essentials of phonetics. Drill in pronunciation and in comprehending the spoken language. Elements of grammar. Memorizing of idioms and poems. Dictation. Reading of simple prose.

First and second semesters.

1a, 2a. BEGINNERS' GERMAN

These courses come six times a week, their object being to give more thorough foundation in the elements than a three-hour course permits. They may be elected as two of the required five courses and count six points towards the A.B. or B.S. degree.

First and second semesters.

3, 4. INTERMEDIATE GERMAN

Rapid review of grammar. Sight reading. Conversation, free reproduction, and composition based on the texts read. Memorizing of idioms and poems. Study of synonyms and of word formation. Grammar drill.

First and second semesters. Open to students who have had 1 *and* 2, *or their equivalent.*

3a, 4a. INTERMEDIATE GERMAN

These courses come six times a week, their object being to give more thorough training than a three-hour course permits, so that one may pursue the advanced courses with greater profit. The work is of the same character as in 3 and 4. They may be elected as two of the required five courses and count six points towards the A.B. or B.S. degree.

First and second semesters. Open to students who have had 1 *a and* 2 *a, or their equivalent.*

5. Introduction to German Literature; Practice in writing German

Heine's prose; selected poems of Goethe, Schiller, Heine, etc. Weekly exercises in writing German. Assigned outside reading.

First semester. Open to students who have had 3 *and* 4, *or their equivalent.*

6. The Classic Period

A study of selected dramas of Lessing, Goethe, and Schiller. Assigned outside reading in classic drama.

Second semester. Open to students who have had 5.

8. Historical, Scientific, and Critical Prose; Practice in writing German

A course for those who wish training in rapid reading, so that they may be able to consult works of reference in German. Assigned outside reading.

Second semester. Open to students who have had 5 *or its equivalent.* (Given in 1912–13, and alternate years.)

9. Goethe's Life and Works

A study of Goethe's personality as reflected in his works. Assigned outside reading in Goethe's works not read in class.

First semester. Open to students who have had 5 *and* 6. (Given in alternate years with 11; to be given in 1913–14.)

10. Survey of German Literature to the Classic Period

Designed to give a comprehensive knowledge of the great movements and the leading ideas in German Literature till Goethe. Assigned outside reading.

Second semester. Open to students who have had 5 *and* 6, *or their equivalent.* (Given in alternate years with 12.)

11. The Modern German Drama

A study of selected masterpieces of Kleist, Grillparzer, Hebbel, Hauptmann, and Sudermann. The development of the drama in the nineteenth century is traced. Assigned outside reading.

First semester. Open to students who have had 5 *and* 6. (Given in alternate years with 9; to be given in 1914–15.)

12. Conversation; Practice in writing German; Methods of teaching German

A course for advanced students, especially those who intend to teach the language. Assigned outside reading.

Second semester. Open to Juniors and Seniors. (Given in alternate years with 10; to be given in 1913–14.)

Note. In the Department of German, students of any class will be assigned to those courses for which, in the judgment of the instructor, they are best fitted.

VIII. GREEK

Professor Burrage

1. Selections from Lysias and Herodotus

In connection with a study of the text there are frequent exercises in composition, and a thorough review of forms and syntax.

First semester. A Freshman elective course.

2. Homer

The *Odyssey*. Those parts of the epic that are of most vital interest are carefully translated and studied. The ethical import is carefully kept in view, and the conditions of the life

described in the poem are illustrated by a consideration of archeological discoveries. Facility in reading is promoted by frequent exercises in sight translation.

Second semester. A Freshman elective course.

3. Selections from the Lyric Poets; Euripides: Iphigenia among the Taurians

An introduction to other forms of poetry than the epic, and to other kinds of meter than the dactylic hexameter. The development in poetical form from Homer to Euripides is traced. Among the authors from whom extracts are made are Archilochus, Alcaeus, Sappho, Anacreon, Simonides, and Bacchylides. In connection with the *Iphigenia among the Taurians* of Euripides, lectures are given on the origin, history, and purpose of the drama.

First semester. A Sophomore elective course.

4. Plato and Xenophon

Apology, *Crito*, selections from the *Phaedo* of Plato; the *Memorabilia* of Xenophon. A study in the life, character, and opinions of Socrates, as he is portrayed by his two friends and disciples. Elementary statement of a few of the problems of philosophy that Socrates raised and tried to deal with. Discussion of the position occupied by Socrates and Plato in the world of philosophy.

Second semester. A Sophomore elective course.

5. Sophocles and Aeschylus

The *Oedipus Tyrannus* and *Electra* of Sophocles; the *Prometheus* and *Persians* of Aeschylus.

6. Aeschylus, Euripides, and Aristophanes

Selections from the *Oresteia* of Aeschylus; the *Medea* of Euripides; the *Frogs* of Aristophanes.

First and second semesters. A Junior-Senior elective course, alternating with 7, 8.

Courses 5 and 6 constitute between them a year's work, and give the student a fairly complete idea of the four great dramatists of Athens. They lay a good foundation for courses in the modern drama or in ethics. The external changes in the drama are carefully noted, and the growth of religious concepts is traced. The remaining plays of the authors mentioned above are read by the student in translation, and reports are required on the more important ones.

7. Plato

The *Republic*.

8. Aristotle

Ethics, Books I-IV and X.

First and second semesters. A Junior-Senior elective course, alternating with 5, 6. (To be given in 1913–14.)

Courses 7 and 8 form a year's work, and afford students of philosophy and ethics a chance to read in the original tongue the two masterpieces of the two greatest minds of antiquity. The charm of the *Republic* as literature will receive special emphasis, and the selections will include all the passages of startling originality.

9. Xenophon and Homer

The *Anabasis* of Xenophon; the *Iliad* of Homer. This course is intended for students who plan to teach Greek in secondary schools. Familiarity with the style of Xenophon and Homer is promoted by copious reading. Careful distinction is made between the essentials and the non-essentials of the language, and an attempt is made to construct such a teaching scheme as will both save the pupil's time and maintain his interest. The leading text-books are compared and criticised. Methods of teaching vocabulary, grammar, reading at sight, and translation are discussed.

First semester. An elective course open to all who have pursued Greek two years in College.

10. The Greek Drama in Translation

This course alternates with Greek Life, and requires no knowledge of Greek. It lays a foundation for the study of the modern drama. The plays read either have value of their own or have exercised an influence on later writers.

Second semester. Elective for Sophomores, Juniors, and Seniors.

11. Greek Poetry in Translation (exclusive of the Drama)

This course affords an opportunity to read the most spirited and adequate modern translations of poetry of such divergent types as Epic, Lyric, Pastoral, and Occasional. Homer, Pindar, Sappho, Theocritus, and the writers of the Anthology are among the authors read.

First semester. Elective for Sophomores, Juniors, and Seniors. (To be given in 1913–14.)

12. Greek Life

Lectures, stereopticon talks, outside reading. For this course no knowledge of Greek is necessary. The instruction is given by means of lectures, supplemented by extensive reading on the student's part. Written tests come every two weeks. The department possesses many slides, illustrative of every phase of Greek civilization, and the library contains the more important works on archeology. The course includes such topics as architecture, dress, education, art, and social, political, and religious ideals.

Second semester. A Junior-Senior elective course. (To be given in 1913–14.)

13, 14. Beginners' Greek

A course for those who have never studied Greek, yet wish to take Greek in College. During the first semester the elements of the language are acquired from some one of the First Greek Books. In the second semester, portions of the

first four books of the *Anabasis* are read, together with easy selections of more general interest. The course must be continued through the two semesters, and should fit the student to take up the regular Freshman Greek the following year.

First and second semesters. Elective for any class.

IX. HISTORY

Assistant Professor WETHERELL
Assistant Professor MORGAN
Assistant Professor WHITE

1. MEDIEVAL EUROPEAN HISTORY

Outline of Western Europe from the fall of the Western Roman Empire to the beginning of the sixteenth century. Courses 1 and 2 cover periods of peculiar importance. They are considered fundamental to all later work in history, and are also valuable in preparation for many courses in other departments. They are made as broad as time allows.

First semester. Elective for Freshmen in the Classical and Scientific Courses; required in the Pedagogical Course. Assistant Professor MORGAN.

2. MODERN EUROPEAN HISTORY

A continuation of 1 from the beginning of the sixteenth century to the present time. This course should lead to a good understanding of the problems of present-day Europe. The part taken by England in modern history is made prominent, and connections with American history are frequently pointed out.

Second semester. Elective for Freshmen. Assistant Professor MORGAN.

3. AMERICAN HISTORY TO 1760

A broad outline which may be taken as an end in itself,

or as a basis for more intensive work. A good preliminary knowledge of European—especially English—history is very desirable.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (To be given in 1913–14.)

NOTE. In connection with the various electives in American History, attention is called to the closely related Political Science courses, 5 and 6.

4. AMERICAN HISTORY, 1760–1815

A continuation of 3.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (To be given in 1913–14.)

5. AMERICAN HISTORY, 1815–1861

Similar to 3 and 4 in scope and treatment.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (Given in 1912–13.)

6. AMERICAN HISTORY FROM 1861

A continuation of 5.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (Given in 1912–13.)

7. THE EXPANSION OF THE AMERICAN PEOPLE TO 1840

An advanced consideration of a phase of American history for students well acquainted with the general subject. Geography and history are closely correlated. The course includes studies of the physical geography and primitive condition of America; European colonization as influenced by natural conditions; the shifting of the frontier from the Atlantic toward the West, with reasons for particular variations; effects of the struggle with New World conditions on the European settlers' ideas and institutions; successive stages of life left by advancing frontiers; stranded and isolated

frontiers; acquisitions of territory; geographic areas and sectionalism; local and national problems growing out of expansion; and, in general, the moulding effects on the nation's life of the conquest of a continent.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (To be given in 1913–14.)

8. THE EXPANSION OF THE AMERICAN PEOPLE FROM 1840

A continuation of 7.

Second semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (To be given in 1913–14.)

9. THE AMERICAN CIVIL WAR, 1850–77

A broad treatment of the Civil War as a transition period in American history. Military and naval events are subordinated, and economic, social, and political developments are emphasized.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (Given in 1912–13.)

10. AMERICAN POLITICAL HISTORY SINCE 1877

A study of political issues, party organization, and governmental development in the United States since the Civil War. Emphasis is placed on the interpretation of election returns in the light of economic and social conditions.

Second semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (Given in 1912–13.)

NOTE. Both 6 and 10 are not open to election by the same student.

11. METHOD IN HISTORY

An introduction to the philosophy of history, with methods for the use of student and teacher. Recommended, for the Junior year, to advanced students of history as a basis for more intelligent work; or, for the Senior year, to those who plan to teach history in the high school. Some of the topics

treated are the nature and essential elements of history; relations of history with other subjects; forms in which historical materials are found, with methods of criticising and using sources in the writing of history; personal values of the study of history; the general preparation of the teacher and the place of methods; bibliography of standard authorities in American History; working school-libraries; source-books; text-book criticism; maps, charts, and other aids; elementary and advanced phases of history teaching, and the organization of historical knowledge.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL.

12. ANCIENT HISTORY

A survey of the development of ancient civilization, with special emphasis on the history of Greece and Rome. Much attention is paid to the use of sources, as being of extreme importance in supplying the proper view-point and stimulus, especially to those who are to teach the Ancient History required in high schools.

Second semester. Elective for Juniors and Seniors. Assistant Professor WHITE.

14. CURRENT HISTORY

The laboratory method applied to the study of present-day problems. Materials are drawn from current books, magazines, and newspapers, and the most significant events so discovered are given their historical setting. The course is a study of history in the making and an exercise in culling the news of importance from the mass of current publications. The range of topics is as wide as circumstances allow.

Second semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL and others.

X. LATIN

Professor SANFORD
Assistant Professor WHITE

1. LIVY

For formal translation such chapters of Livy, Books XXI-XXXIX, are selected as to constitute a fairly comprehensive story of the second Carthaginian war from its beginnings to the defeat at Zama. Library readings on the characteristics of Roman and Carthaginian, the nature of the struggle, and the importance of the results of the war are assigned. Written tests in sight reading are from Livy and other historians. The method of question and answer in Latin gives the student a direct knowledge of simple form and syntax. During the semester there are required about twenty prose exercises based upon the text translated. These exercises include a thorough review of the more elementary principles of Latin writing, much practice in the handling of verb forms, and a study of the development and use of cases.

First semester. Required of A.B. Freshmen. Assistant Professor WHITE.

2. CICERO

Selections from the *Letters*. In order to promote correctness in translation and fluency of rendering the Latin period, several written tests in sight translation are given, in which the papers presented are commented upon by the instructors in both the English and the Latin departments. The historical outline takes up the story at the time of the struggle between Republic and Empire, and runs contemporaneously with the fortunes of Caesar and Cicero as written in the *Letters*. In order to further familiarize the student with the language as living and in action, part of the recitation work will be conducted in Latin. Weekly exercises in prose deal largely with the subject of the development, history, and use of mood.

Second semester. Required of A.B. Freshmen. Assistant Professor WHITE.

3. TACITUS

The *Germania* and *Agricola*. Comparison of the style of Tacitus with that of other writers of his time. A study of the Roman colonial system. Outline of the history of the later Empire, with brief investigation into the subject of the influence of Rome on the northern tribes and, incidentally, our own inheritance of law and custom from them. Library reading and the study of photographs of Roman remains in Germany and England.

First semester. Elective for Sophomores who have had 1 *and* 2. Professor SANFORD.

4. HORACE

Selected *Odes* and *Epodes*. By comparison of the odes with lyrics in Latin and other languages the class attempts to estimate the place of Horace among the poets. The debt of English poetry to Horace is continually referred to, and borrowed or suggested phrases, imitations, and translations in our own lyrics are daily sought in illustration. Very careful preparation of note-books is required.

Second semester. Elective for Sophomores who have had 1 *and* 2. Professor SANFORD.

5. ROMAN COMEDY

The translation of the *Captivi* of Plautus and the *Andria* of Terence, with rapid readings from other comedies.

First semester. Elective for Juniors and Seniors. Professor SANFORD.

6. PLINY

Selections from the *Letters*. The course is intended to give practice in rapid reading. Comparison of the *Letters* with the

correspondence of Cicero and others. Lectures on the book-making and letter-writing of the Romans.

Second semester. Elective for Juniors and Seniors. Professor SANFORD.

7. A Study in Latin Lyrics

Fragments preserved from the early writers are quoted to point out the beginnings of poetry. Selections from Catullus, Horace, Vergil, Ovid, Tibullus, Propertius, and others are read to show the Latin lyric in its perfection. A few poems of the Silver Age are given to indicate the changes of form and style to medieval and monkish rhymes. The hymnology of the early Church.

First semester. Elective for Juniors and Seniors. Professor SANFORD. (To be given in 1913–14.)

8. A Study in Roman Philosophy

Readings from the *Tusculan Disputations* of Cicero, *De Rerum Natura* of Lucretius, with extracts from Seneca, Marcus Aurelius, and Boethius.

Second semester. Elective for Juniors and Seniors. Professor SANFORD.

9. An Historical Study in Tacitus

An intensive study of some period or topic from the early Roman Imperial Era, with the text of the *Annals* as a base. The aim is to develop in the student a spirit of historical criticism, and to help him to use historical material methodically, especially sources. The course is particularly valuable to those who may teach Ancient History.

First semester. Elective for Juniors and Seniors. Assistant Professor WHITE.

10. The Teaching of Preparatory Latin

A study of methods and authors used; the relative value of vocabularies, grammatical drill, and sight reading; exami-

nation of text-books; Caesar and the substitute authors; the incidental study of the Latin element in English speech, with rapid examination of the vocabularies of Milton, Shakespeare, and others; Grimm's law; alternate drifts toward the Latin and toward the Saxon forms; colloquia; tests; the necessity of making Latin a live language; quality versus quantity; literary appreciation.

Second semester. Elective for Juniors and Seniors. Professor SANFORD.

11. ADVANCED LATIN PROSE

An investigation of vocabularies found in prominent Latin authors of both prose and poetry; a comparison of the periodic sentence with the loose structure of the English; examination of the diction of the authors used in the preparatory work; the writing of detached sentences and of connected discourse.

First semester. Elective for Juniors and Seniors. Professor SANFORD. (To be given in 1913–14.)

12. VERGIL

The reading of selections from the *Aeneid*, the *Eclogues*, and the *Georgics*, a study in literature rather than syntax; Vergil's personality and peculiar fame; his place among the world's poets; the debt of our own literature to the *Aeneid*.

Second semester. Elective for Juniors and Seniors. Professor SANFORD.

13. OUTLINES OF ANCIENT AND MEDIEVAL ART

The buildings, the statuary, and the painting of the Egyptians, the Assyrians and Babylonians, the Greeks, and the Romans; the mission of the Greeks to the later nations in art; the skilful adaptation of the Romans from the models of all the previous schools; the development of early and medieval Italian art; Michael Angelo; Raphael. Illustrated by stereopticon and reflectoscope.

First semester. Elective for Juniors and Seniors. Professor SANFORD.

15. ROMAN ARCHEOLOGY

Lectures on the topography of Italy, and the buildings and statuary of Ancient Rome and its colonies. Readings on various topics from Middleton, Lanciani, Jordan, Parker, Burn, Hülson, Platner, and the journals are required, with careful preparation of note-books. Illustrations are by photographs, the Canina, Piranesi, and Niccolini plates, and stereopticon views. The course is especially designed for those who intend to teach Latin. It also furnishes a background for any historical study of the Roman people or of the nations that came under their immediate influence.

First semester. Elective for Juniors and Seniors. Professor SANFORD.

17. OUTLINES OF LATIN LITERATURE

A review of all the authors from Ennius to Boethius; reading of translations; an attempt to form an estimate of the place and value of the literature as a whole, and the tendencies toward appreciation and depreciation at the present time; the passing of the Latin into the Italian, the French, and the other Romance languages; the jingles and the rhymes of the monks; attempts to revive the vernacular.

First semester. Elective for Juniors and Seniors. Professor SANFORD. (To be given in 1913–14.)

XI. MATHEMATICS

Assistant Professor CRESSE
Assistant Professor PAINE

1. SOLID GEOMETRY

Books VI, VII, VIII, Wentworth's *Solid Geometry.*

First semester. Required of all Freshmen, except in the Pedagogical Course. Assistant Professors PAINE and CRESSE.

2. ALGEBRA

Property of quadratics; complex numbers; mathematical induction; binomial formula; permutations and combinations; probability; theory of equations; determinants.

Second semester. Required of all Freshmen, except in the Pedagogical Course. Assistant Professors PAINE and CRESSE.

3. LOGARITHMS AND TRIGONOMETRY

Theory and use of logarithms; trigonometric analysis; solution of triangles; application to the data of a surveyor.

First semester. Elective for students who have completed 1. Assistant Professor CRESSE.

4. PLANE ANALYTIC GEOMETRY

Loci and their equations in Cartesian coördinates; transformation of coördinates; the line, circle, parabola, ellipse, hyperbola; the general equation of the second degree; poles and polars; use of polar coördinates.

Second semester. Elective for students who have completed 3. Assistant Professor CRESSE.

5. DIFFERENTIAL CALCULUS

Differentiation of functions; differentials and infinitesimals; series; expansion of functions; intermediate forms; maxima and minima of functions of one independent variable; partial differentiation; maxima and minima of functions of two or more variables; direction of curves; tangents and normals; direction of curvature; points of inflection; curvature; radius of curvature; evolute and involute.

First semester. Elective for students who have completed 4. Assistant Professor CRESSE.

6. INTEGRAL CALCULUS

Integration of standard forms; integration of rational frac-

tions; special methods of integration; definite integrals; application of integrations to plane curves and certain volumes; multiple integration, with applications to the surface, volume, and moment of inertia of any solid; also to center of gravity, pressure of fluids, and force of attraction.

Second semester. Elective for students who have completed 5. Assistant Professor CRESSE.

7. DIFFERENTIAL EQUATIONS

A problem course in ordinary equations of the first order, ordinary linear equations of higher order, systems of ordinary equations of the first order and first degree, and linear partial equations of the first order. "Standard forms." Throughout the course emphasis is placed on the geometric meaning and physical application of the equations.

First semester. Elective for students who have completed 6. Assistant Professor CRESSE. (Given in 1912–13, and alternate years.)

8. ADVANCED GEOMETRY

Selected topics and problems in solid analytic geometry. Methods of modern geometry; homogeneous coördinates; abridged notation; investigation of the properties of curves by recourse to inversion; polar reciprocation and projection.

Second semester. Elective for students who have completed 6. Assistant Professor CRESSE. (Given in 1912–13, and alternate years.)

9, 10. THE DIFFERENTIAL EQUATIONS OF MATHEMATICAL PHYSICS

The Newtonian and logarithmic potential functions. Surface distributions; Greene's theorem, attraction of ellipsoids; Fousier's series, spherical and cylindrical harmonics. Applications of the foregoing to electrostatics; the steady flow of heat and electricity, and acoustics. The mathematical theory of the cooling of the earth, and the analysis of the vibrations

of piano, harp, and violin strings, and elastic membranes, are among the problems taken up in this course.

First and second semesters. Elective for students who have had Mathematics 6 *and Physics* 4. Assistant Professor PAINE.

XII. PEDAGOGY

Professor COLLINS
Professor MCFARLAND

1. PRINCIPLES OF EDUCATION

A general introduction to pedagogy from the genetic point of view, defining education; tracing its bases in biology, psychology, and epistemology; discussing the evolution of theoretical and practical educational aims; analyzing the agencies that educate, the educative process, and the special values of different subjects of the conventional curriculum. The course is planned for Seniors who have not taken the Pedagogical Course, and it is introductory to the technical preparation for teaching offered in 6 and 8.

First semester. Elective for Juniors and Seniors. Professor COLLINS.

2. EDUCATIONAL PSYCHOLOGY

Ways of studying mental phenomena; the nervous system and its functions; the dawning of conscious life in a child; the development of senses and their part in education; steps in mental development; the period of adolescence; the psychological basis of method; how to study and how to teach.

Second semester. Required of Freshmen in the Pedagogical Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

3. HISTORY OF EDUCATION IN EUROPE

Educational views and customs in ancient, medieval, and modern times. Education in the Homeric period; school life

in old Greece; the new Greek education; early Roman training; Graeco-Roman schools and schoolmasters; the training of the early Christians; the decline of classical learning; the rise of church control; the schools of the monasteries; scholasticism; the universities of the Middle Ages; medieval student life; the educational significance of the Renaissance and the Reformation; the genesis of modern educational ideas and ideals.

First semester. Required of Sophomores in the Pedagogical Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

4. AMERICAN EDUCATION

The evolution of the public school system in its elementary, secondary, and collegiate features; and a study of the present organization and current problems of education in the United States, with comparisons drawn from European schools.

Second semester. Required of Sophomores in the Pedagogical Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

5. EDUCATIONAL THEORY

An introductory course dealing with topics fundamental to education, such as the nature and meaning of education in their individual and social aspects; the bases of education; the meaning of infancy; the influences of heredity and environment; the importance of adolescence, and its needs; the meaning of the whole educational process; and the principles of teaching based on a consideration of the philosophy of education.

First semester. Required of Juniors in the Pedagogical Course; elective for A.B. and B.S. Juniors and Seniors. Professor MCFARLAND.

6. INTRODUCTION TO TEACHING

Elements of general method; the method of the recitation; the

organization and management of secondary schools; standards of excellence in high school work; practice in class teaching. A course intended primarily for those preparing for high school work.

Second semester. Required of Juniors in the Pedagogical Course; elective for A.B. and B.S. Juniors and Seniors. Professor McFARLAND.

7. SECONDARY EDUCATION

Studies in special method relating to high school mathematics and sciences; a consideration of the value, the content, the problems, and the methods of teaching special subjects; standards of excellence; necessary school equipment; the teacher's preparation. Investigations, reports, lesson outlines, and practice teaching.

First semester. Elective for Juniors and Seniors. Professor McFARLAND.

8. SECONDARY EDUCATION

A treatment of high school history and languages similar to that of 7.

Second semester. Elective for Juniors and Seniors. Professor McFARLAND.

9, 10. SCHOOL ADMINISTRATION AND SUPERVISION

A course for men intending to enter upon the work of educational management. Students wishing to take this course must secure the permission of the instructor before electing it.

First and second semesters. Elective for Seniors in the Pedagogical Course. Professor COLLINS.

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For students who wish to fit themselves for teaching or supervising, further specialization is provided

by the coöperation of other departments in offering courses helpful to teachers.

XIII. PHILOSOPHY

Assistant Professor CUNNINGHAM

1. General Psychology

Introductory study of the problems of normal psychology. The nature and methods of the science; the central nervous system; elementary and complex mental processes. Reading in text supplemented by experiments.

First semester. Elective for Sophomores, Juniors, and Seniors.

2. Logic

An introductory course in logical theory. Nature and rules of the syllogism; moods; figures; fallacies; problem and methods of induction; nature and laws of thought.

Second semester. Required of all Sophomores.

3. General Ethics

Introductory course in ethical problems. Development of moral ideals; discussion of practical problems; general consideration of the more important ethical theories.

First semester. Elective for Sophomores, Juniors, and Seniors.

4. Advanced Ethics

A more detailed study of ethical theories. Investigation and criticism of the views of Kant, Mill, and Bentham. Essays dealing with such problems as the standard of moral action; the nature of conscience; the moral law; the feeling of obligation and duty. Extensive reading in the Library.

Second semester. Elective for Juniors and Seniors, and for Sophomores who have had 3.

5. History of Greek and Medieval Philosophy

General survey of the development of philosophical conceptions from the sixth century B.C. to the beginning of the modern era. The period of Greek philosophy is dealt with in some detail, attention being fixed primarily upon Socrates, Plato, and Aristotle. The period of the Middle Ages is passed over more rapidly, but enough time is devoted to it to enable the student to grasp the different tendencies of the period. The views of Augustine, Anselm, Thomas Aquinas, and Scotus are considered.

First semester. Elective for Sophomores, Juniors, and Seniors.

6. History of Modern Philosophy

A review of the development of modern thought. Detailed study of the views of the Rationalists, the Empiricists, Kant, Fichte, Hegel. Post-Hegelian tendencies are indicated and the present status of philosophical and ethical inquiry outlined so far as time will allow. This course is planned as a possible continuation of 5, but it may be taken to advantage by those who have not had the latter course.

Second semester. Elective for Sophomores, Juniors, and Seniors.

7. The Philosophy of Kant

An exhaustive study of the system of Immanuel Kant. Detailed examination of the *Critique of Pure Reason*. The *Critique of Practical Reason* will be studied less thoroughly, but in sufficient detail to give the student a just appreciation of the system as a whole. Course 6 is a helpful introduction.

First semester. Elective for Juniors and Seniors. (To be given in 1913–14.)

8. Studies in Contemporary Philosophy

A survey of current philosophical tendencies. Discussion of the doctrines of Idealism, Pragmatism, and Realism. Parallel readings and reports. Course 7 will prove a very valuable introduction to this course.

Second semester. Elective for Juniors and Seniors. (To begiven in 1913–14.)

9. Introduction to Philosophy

Independent investigation of the fundamental problems of experience. The existence and nature of God; materialism; idealism; pluralism; monism; the freedom of the will; the immortality of the soul. Frequent references to what the greatest philosophers have thought concerning these problems. The course is constructive, the effort being to work out a consistent theory of the world. Students desiring this course should elect 5 and 6 as introductory.

First semester. Elective for Juniors and Seniors. (To be given in 1914–15.)

10. Advanced Psychology

Detailed studies in attention, memory, imagination, association of ideas, and the emotions. Extensive reading in psychological literature bearing on these subjects. Frequent reports and discussions.

Second semester. Elective for those who have had 1. (To be given in 1914–15.)

11. Studies in Religion

Historical and critical. Totemism, fetishism, ancestor-worship, prayer, magic. The fundamental doctrines of Brahmanism, Buddhism, Confucianism, Christianity, Mohammedanism. The basis and meaning of religion. Interpretation and criticism of national religions. Parallel reading with essays and frequent reports. Course 9 is a helpful parallel course.

First semester. Elective for Juniors and Seniors. (Given in 1912–13, and alternate years.)

XIV. PHYSICS

Professor BRYANT

1. General Physics

Fundamental principles of kinematics; simple harmonic motion; inertia; gravitation; work and energy; elasticity; properties of liquids and gases; waves; sound; reflection, refraction, interference, diffraction, and polarization of light waves, and spectrum analysis.

First semester. Elective for Sophomores in the Classical Course, and for Freshmen in the Scientific and Pedagogical Courses.

2. General Physics

A continuation of 1. Theory of heat; calorimetry; transference of heat; thermal expansion; change of state; nature of heat; the earth's magnetic field; magnetic induction; electrostatic induction, potential, and capacity; production of electric currents; electromotive force; electrical resistance; measurement of current; chemical, heating, and magnetic effects of the electric current.

Second semester. Elective for Sophomores in the Classical Course, and for Freshmen in the Scientific and Pedagogical Courses.

3. Light

An advanced course, intended for those students who wish a more extended knowledge of this subject than can be obtained from the course in General Physics. The laws of reflection and of refraction, with their application to optical instruments; the wave theory of light; the spectrum and its teachings; the phenomena of radiation, absorption, dispersion, interference, and diffraction are some of the topics considered.

First semester. Elective for students who have completed 1 *and* 2. (To be given in 1913–14.)

5. Electricity and Magnetism

An advanced course covering more thoroughly many of the topics studied in the corresponding work in General Physics, together with some additional topics, such as the discharge of electricity through gases, electrons, radio-activity, and wireless telegraphy.

First semester. Elective for students who have completed 1 *and* 2.

7. Physical Measurements

Elementary theory and practice of physical manipulation. Laboratory work in the measurements of length, mass, time, velocity, linear and angular acceleration; the verification of the laws of equilibrium of forces; the determination of coefficients of elasticity; the density of solids, liquids, and gases; experiments in sound. In this course and in 6 a complete record of every experiment, giving the apparatus used, the measurements taken, and the results obtained, is required of every student. Frequent lectures and quizzes are introduced to insure a thorough understanding of the principles which underlie the different experiments.

First semester. Elective for students who have completed 1 *and* 2. *Laboratory fee*, $5.

8. Physical Measurements

A continuation of 7. The student is expected to have acquired such facility in the manipulation of apparatus and such ability to grasp the laboratory method of ascertaining physical laws as will enable him to perform accurately and intelligently the more difficult experiments in heat, light, electricity, and magnetism. Measurements are made of thermal expansion, specific heat, latent heats of fusion and of evaporization. In electricity, fields of force, electric resistance, electromotive forces, and strengths of current are measured. The laws of reflection and refraction of light waves, the formation of images by mirrors and lenses are studied, and

indices of refraction and lengths of light waves are measured.

Second semester. Elective for students who have completed 7. *Laboratory fee*, $5.

10. Astronomy

The celestial sphere; astronomical instruments; determination of latitude, longitude, and time; the earth as an astronomical body; the moon's motions and physical characteristics; the sun's physical characteristics; revelations of the spectroscope; eclipses; planets; comets; stars and nebulae.

Second semester. Elective for Juniors and Seniors.

XV. POLITICAL AND SOCIAL SCIENCE

Assistant Professor Morgan
Assistant Professor Wetherell
Mr. Horton

1. Principles of Economics

A general course for beginners. Its purpose is to afford a systematic survey of the field of economics.

First semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Morgan.

2. Economics of Transportation

Railway development, organization, and regulation, with special emphasis on American railways; ocean and inland water transportation.

Second semester, alternating with 14. *Course* 1 *prerequisite.* Assistant Professor Morgan. (To be given in 1913–14.)

3. Money, Credit, and Banking

Monetary theory, credit instruments, and the monetary experience of the United States; the theory of banking; the banking systems of the United States and the leading Euro-

pean countries. One-third of the time is devoted to work in the laboratory.

First semester. Course 1 *prerequisite.* Assistant Professor MORGAN.

4. PUBLIC FINANCE

The principles of government expenditure, revenue, and debt; examination of American and European tax systems, with special emphasis on present-day problems of taxation in the United States.

Second semester. Course 1 *prerequisite.* Assistant Professor MORGAN.

5. THE ENGLISH GOVERNMENT

A description of the present working English government, together with sketches of historic development and comparisons with the leading governments of continental Europe. A good knowledge of general English history — as much as may be gained in History 1 and 2 — is taken for granted. This course furnishes a very desirable introduction to the course in American Government. Together they lay the basis for the more detailed and technical courses in the department.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

6. THE AMERICAN GOVERNMENT

A rapid survey of the whole field — national, state, and local. Descriptive, with sketches of historical development. A good knowledge of American history is assumed.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

5 a, 6 a. AMERICAN CONSTITUTIONAL HISTORY AND LAW

A broad study of the American constitutional system from both the historical and the legal viewpoints. During the first

semester emphasis is placed on constitutional history; in the second semester the legal side is more prominent, and a technical study of great constitutional cases is made.

First and second semesters. Elective for Juniors and Seniors. Assistant Professor WETHERELL and Mr. HORTON.

7, 8. ELEMENTARY LAW

The fundamental principles of elementary law and selected topics most useful to the American student of law. Although important in its general information and training, the course is primarily for students who expect to enter the profession of law, and is prerequisite to the advanced courses. Lectures, recitations, and library work upon cases.

First and second semesters. Elective for Sophomores and Juniors. Mr. HORTON.

9. LAW OF BUSINESS

Lectures and discussions on the general principles of law which every person should know and act on daily, including contracts, sales, agency, bailments, commercial paper, corporations, insurance, partnership, property, etc. The course is practical and elementary rather than technical.

First semester, alternating with 11. *Elective for Juniors and Seniors.* Mr. HORTON. (To be given in 1913–14.)

10. INTERNATIONAL LAW

A careful study of the origin and development of the rules which generally govern the intercourse of modern civilized states and their recent modifications by treaty. Lectures and library work upon the history of American diplomacy and the progress in international arbitration.

Second semester. Required of all Seniors. Mr. HORTON.

11. ROMAN LAW

A systematic study of the law of Rome and its historical development, with a critical examination of the Institutes of

Justinian. The influence of Roman law on the common law is considered.

First semester, alternating with 9. *Elective for Juniors and Seniors.* Mr. HORTON.

12. PROBLEMS OF LABOR

Progress of the workers in Europe and the United States; conditions, wages, hours, organization, legislation.

Second semester, alternating with 16. *Course* 1 *prerequisite.* Assistant Professor MORGAN. (To be given in 1913–14.)

14. ECONOMICS OF CORPORATIONS

The growth of corporations in general; the promotion, organization, and management of typical corporations; the trust problem.

Second semester, alternating with 2. *Course* 1 *prerequisite.* Assistant Professor MORGAN.

16. SOCIAL REFORMS

Social romances; communistic experiments; history of socialism; examination of the works of selected modern socialists.

Second semester, alternating with 12. *Course* 1 *prerequisite.* Assistant Professor MORGAN.

NOTE. Courses 5, 6, 5a, 6a, 7, 8, 9, 10, and 11 are similar to courses given in the first year's work of a law school, and arrangements have been made with leading law schools for the allowance of credit for them toward the work required for the degree of Bachelor of Laws.

THE WOMEN'S COLLEGE

IN CONNECTION WITH MIDDLEBURY COLLEGE

CAROLINE CRAWFORD, Dean

IN 1883 Middlebury College opened its doors to women, and offered to them the same courses and privileges afforded to men. In 1902 a charter was granted for an affiliated College for Women, and steps have been taken toward two coördinate institutions, one for men and one for women, as fast as resources have allowed. It is believed that both men and women are better for the distinct social life of a separate College, but that the greater economy in administration and instruction when the education of both sexes is conducted under the same corporate management and by the same Faculty justifies affiliated institutions in the same locality.

The President and Fellows of Middlebury College exercise full supervision and control of the Women's College. They are authorized to receive gifts of money for scholarships and professorships for the benefit of women students, for buildings for women, and for the general purposes of the Women's College. Bequests, legacies, and gifts for the education of women in connection with Middlebury College, like those intended for any other department of the College, should be made payable to "The President and Fellows of Middlebury College."

Women in Middlebury are taught by the same Faculty as men, and enjoy the same privileges in the

Library and Laboratories. All studies of the Classical and Pedagogical Courses are open to them, with the same freedom of election, and they have equal opportunities in the Department of Pedagogy established by the State.

The Dean seeks to be the friend and adviser of each woman in College. The social activities of the women are under her direction.

Pearsons Hall, completed in 1911 with a portion of the D. K. Pearsons Fund of $100,000, accommodates, with Battell Cottage, about one hundred women. The College will provide residence for women, except where special permission is obtained to reside elsewhere.

The requirements for admission to the Women's College are the same as those for men in the Classical and Pedagogical Courses. Women are accorded the degree of A.B. upon graduation and may attain the degree of A.M. Separate chapel exercises are maintained for them, and separate recitations in most of the required work of the first two years.

Special courses for women are offered in the following subjects:

DRAMATIC AND SOCIAL ARTS

Assistant Professor CRAWFORD

DRAMATIC ARTS

1, 2. THE ARTS OF MOVEMENT

The earliest forms of art—the festival, dance, music, poetry. Their development as modes of expression and their

significance as the bases for the interpretation of all art-forms.

First and second semesters. Elective for all classes.

3, 4. The Drama

An opportunity is offered for the study of the drama through the preparation and production of plays.

First and second semesters. Hours by consultation. Elective for all classes.

SOCIAL ARTS

1. The Principles of Art

The principles which underlie expression in the lesser and in the fine arts.

First semester. Elective for Sophomores, Juniors, and Seniors. (To be given in 1913–14.)

2. The Social Function of Art

A study of the origin and evolution of the festival, sculpture, drama, painting, poetry, and music, in their relation to social progress. The relation of the arts to social life. The function of art in the life of the community.

Second semester. Elective for Sophomores, Juniors, and Seniors.

3. Women and the Social Movement

An historical study of the problems of social adjustment. The position, education, and influence of women from the time of the Renaissance.

First semester. Elective for Juniors and Seniors.

4. Women and the Social Movement

The function of women in relation to industrial, religious, and artistic progress. The art of social evolution.

Second semester. Elective for Juniors and Seniors.

HOME ECONOMICS

Miss Wells

1. Food: Its Selection and Preparation

The classification, composition, and study of food; its nutritive and economic values and functions. The principles involved in the application of heat to food constituents, and the various processes applied in the preparation of food. Lectures, recitations, and laboratory work.

First semester. Elective for Juniors. Laboratory fee, $5.

2. Household Hygiene

Food products, their manufacture, adulteration, and preservation. Legislation in regard to "pure food" and its results. The care of food in the home. The preparation, serving, and cost of meals. Household sanitation, including the location of a house, drainage, water supply, heating, cleaning, and ventilation.

Second semester. Elective for Juniors who have completed 1. *Laboratory fee*, $5.

3. Dietetics

The principles of nutrition, the chemistry and physiology of digestion, the nutritive function of the food principles. A study of children's diets, invalid cookery, and advanced methods of preparation. Lectures, recitations, and laboratory work.

(*a*) *Preliminary work.* Twenty hours of work is expected of each member of the class for the purchase of supplies, the preparation and serving of meals, and the care of the Demonstration Apartment.

(*b*) *Housekeeping duties.* The class will be divided into groups, and each group will have the entire charge of the Apartment for four days.

First semester. Elective for Seniors who have completed 1 *and* 2. *Laboratory fee*, $5.

4. Household Management

Organization of the household; the division of the income and household accounts; the buying of supplies; household furnishing and decoration; the care of the house.

Second semester. Elective for Seniors who have completed 3. *Laboratory fee*, $5.

6. Sewing

This course presupposes some knowledge of elementary sewing. The designing, drafting, and making of undergarments and simple dresses. Material to be provided by the students.

Second semester. Elective for Seniors.

8. Textiles

The history and the processes of textile manufactures. The study of quality and cost in the selection of materials. Chemical tests for fabrics.

Second semester. Elective for Juniors and Seniors.

9. Domestic Laundering

The laundry equipment at Pearsons Hall will be used under the supervision of the head of the Demonstration Apartment.

THE SUMMER SESSION

RAYMOND MCFARLAND, Director

MIDDLEBURY College held its fourth Summer Session July 2 to August 9, 1912, and presented the following courses of instruction:

1. Efficiency in Teaching	*Professor* McFarland
2. School Hygiene	*Professor* McFarland
3. Seminar in Secondary Education	*Professor* McFarland
4. General Descriptive Psychology	*Assistant Professor* Cunningham
5. Seminar in Psychology	*Assistant Professor* Cunningham
6. Shakespeare	*Assistant Professor* Cady
7. The Novel	*Assistant Professor* Cady
8. The Victorian Age	*Dr.* J. W. Abernethy
9. Beginning French	*Principal* A. S. Harriman
10. Elementary French	*Dr.* Gino A. Ratti
11. French Literature of the Nineteenth Century	*Dr.* Ratti
12. Beginning Italian	*Dr.* Ratti
13. Beginning German	*Mr.* J. H. Bachmann
14. German Prose	*Dr.* R. W. Pettengill
15. German Conversation	*Dr.* Pettengill
16. The German Short Story	*Mr.* Bachmann
17. Outlines of German Literature	*Dr.* Pettengill
18. Roman Life	*Assistant Professor* White
19. The Life and Works of Vergil	*Assistant Professor* White
20. Cicero's Orations	*Principal* Harriman
21. History for Teachers	*Assistant Professor* Wetherell
22. Seminar in History	*Assistant Professor* Wetherell
23. Secondary School Agronomy	*Assistant Professor* Lyford
24. Elementary Agriculture	*Principal* H. A. Farrar
25. Elementary Chemistry	*Assistant Professor* Lyford
26. Analytical Chemistry	*Assistant Professor* Lyford
27. Elementary Physics	*Mr.* H. T. Stetson
28. Entrance Physics	*Mr.* Stetson
29. Descriptive Astronomy	*Mr.* Stetson
30. Nature Study	*Professor* John Barlow
31. General Zoölogy	*Professor* Barlow
32. Entomology	*Professor* Barlow
33. Advanced Algebra	*Principal* Harriman
34. Solid Geometry	*Assistant Professor* Paine

35. Plane Trigonometry and Logarithms	*Assistant Professor* Paine
36. Drawing	*Miss* Mabel B. Hall
37. Design	*Miss* Hall
38. Domestic Science	*Miss* Marion Spaulding
39. Food Study	*Miss* Spaulding
40. Vocal Music	*Mrs.* Ratti

The fourth Summer Session was attended by 84 students, whose names will be found on pages 137 to 139.

Announcement. The fifth Summer Session will be held from July 1 to August 8, 1913. The College laboratories, libraries, halls of residence, and dining hall will be open, with increased facilities. The work of the Session of 1913 will emphasize academic courses of collegiate and advanced grade, without lessening the advantages hitherto enjoyed in arts and crafts. An abundance of work will be provided leading to the degrees of A.B., B.S., A.M., and M.S. There will also be adequate provision for the needs of individuals who wish to pursue some chosen line of work or reading less intensively, for purely cultural purposes.

Examinations are not required for entrance; but credits toward degrees or for admission to College will not be given unless work is pursued with regularity and completed with satisfactory examinations. Students are not required to be candidates for credits, however. The satisfactory completion of each full course for college credits confers upon the candidate two credits toward a degree; a total of six is permissible at any session.

By reason of accessibility, the facilities afforded by the College, the delightful climate, the large proportion of the regular Faculty who remain to instruct, the spirit in which the work is conducted, and the slight

financial burden imposed, the Summer Sessions of Middlebury College provide an unusually attractive meeting place for teachers and students of educational, social, and religious problems.

The February number of the Middlebury College Bulletin will be a prospectus of the Summer Session of 1913. Send applications for this number to The Director, Summer Session, Middlebury, Vt.

GENERAL INFORMATION

MIDDLEBURY College was chartered in 1800, and its first class was graduated in 1802, at which time the first academic degrees conferred in Vermont were bestowed. Even before the granting of a charter, collegiate work had been prosecuted in Middlebury, under the leadership of Rev. Jeremiah Atwater, Yale, 1793, the Principal of the Addison County Grammar School, who became the President of the College, having been recommended for the position by Doctor Dwight, then President of Yale College. A library of 494 volumes had already been carefully selected and presented to the College. For ten years all the work of the institution was conducted in a large frame building which it shared with the Addison County Grammar School, but in 1810 Colonel Seth Storrs of Middlebury gave to the Corporation thirty acres of land, "beautifully situated in an elevated part of the village," which now forms part of the College Campus. On this site the first building of the College was erected in 1814. It was called at first "West College," but in 1846 was named Painter Hall, in honor of Hon. Gamaliel Painter, one of the most generous patrons of the College and most useful citizens of the town, who had bequeathed all his property to the institution. It has been in continuous use since its erection, and is the oldest college building in Vermont. The commodious and beautiful Chapel was erected in 1836, and is still the most commanding object on the Campus and in the landscape of the village, and a useful and convenient administration and recitation building. Starr Hall, a large dor-

HISTORY OF THE COLLEGE

mitory, was erected by the beneficence of Charles and Egbert Starr in 1861, and rebuilt in 1865, after a disastrous fire, by the same donors. These three graceful stone buildings, forming a college row typical of New England, give dignity and quiet beauty to one of the most beautiful college parks to be found in America.

The builders of Middlebury were men of deep religious faith and earnest moral purpose, and clergymen from the surrounding towns long exercised controlling influence in the Corporation. The College has had a long and heroic struggle with poverty, but her doors have never been closed and she has furnished uninterruptedly to the youth of northern New England opportunities for thorough literary education and a vantage point of outlook upon the larger life of the world.

MIDDLEBURY'S RECORD

During her first century Middlebury sent out 1,686 graduates; 543 of these were clergymen, including 71 missionaries. An exceptionally large proportion became teachers, of whom 106 were professors in colleges or theological seminaries; 32 college presidents were sent forth by Middlebury from 1800 to 1900. She graduated in that time 400 lawyers, including over 50 judges of courts. Fifteen of her alumni have been members of Congress, and nine, governors of States or Territories. It is Middlebury's boast that, in proportion to her size and the means at her command, no American college has made a nobler record.

A residential town of 2,000 people, on the Rutland Railroad, New York Central Lines, with through trains between New York and Boston and Montreal, Middlebury is an ideal location for a rural New Eng-

land college. The foot-hills of the Green Mountains are a few miles distant. From the heights of the College Campus one sees many of the grander peaks of the Adirondacks. The Otter River flows through the town, and in its valley are many of the best farms of Vermont. Elms and maples line the village streets, and the houses betoken modest thrift and quiet taste. Water of unexcelled purity and quantity is brought from mountain springs, eight miles distant. Intoxicating liquors are not sold, and there are no trolley lines to neighboring cities. The College is the pride of the village, and many of the homes of the people are open to the students.

THE VILLAGE OF MIDDLEBURY

The specialty of Middlebury is not a department of study, but a type of student. The location of the College in a frugal agricultural region favors economy. For over a century she has sought out particularly the youth from the quiet homes of northern New England and surrounded them with encouragement to modest living while engaged in the pursuit of knowledge. By resolute endeavor college expenses have been kept low. Students who have to work their own way are especially encouraged, in the belief that such students furnish the most healthful tone to an institution of learning. Those who can afford more than Middlebury exacts are invited to consider the advantages to character which come from such an atmosphere in the formative period of life.

MIDDLEBURY'S SPECIALTY

The Middlebury idea is that, since no two men are alike, each student needs the particular care and over-

sight of his instructors during his entire college course.

INDIVIDUAL TRAINING

With a small student body and an ample number of professors such oversight is possible, and the unusual success of Middlebury's graduates is believed to be due to its maintenance.

RECENT PROGRESS

Without departure from the traditions of the New England small college, additions to the buildings, equipment, courses, and instructing staff have been made in the few years past, which add materially to the advantages offered to students. In the fall of 1913 a new hall of chemistry, elsewhere described, will be opened. The McCullough Gymnasium, begun in 1911, is now in active use. A central heating plant was installed in 1912, and the buildings on the Campus are now warmed by steam conveyed through underground conduits.

In February, 1912, the College received a gift of eighty acres of land for a new athletic field. This land extends from the Cornwall road to South Street, and is convenient to the Campus. A field for baseball and football has been drained and graded, and will be ready for use in the season of 1913. It will be known as the Porter Athletic Field.

During the past year the College has made available a pledge of the General Education Board of $50,000, provided an additional sum of $150,000 was secured. This condition was met, and the major part of the subscriptions have been paid. Of this amount $100,000 has been added to the permanent endowment.

It will be noted that the instructing staff now numbers twenty-eight, more than double the number of four years ago. There has been a gain in student attendance every year for ten years, and in six years the number has doubled. Attention is called to recent additions to the curriculum in subjects fundamental to engineering, physical education, home economics, and forestry.

GRADUATE WORK

In the announcements of the Departments of Instruction will be found many courses which are suitable for graduate work. Particularly in connection with the Department of Pedagogy, a fifth year of college study may be recommended in preparation for teaching. Graduate students are welcome in all courses in which work is sufficiently advanced to count for a Master's degree, and whenever possible special direction will be afforded them.

The degrees of Master of Arts and Master of Science are offered for graduate work performed in the regular college year, at summer sessions, or *in absentia*, in accordance with the following regulations:

1. The candidate must have a baccalaureate degree from this College, or from one having an equivalent curriculum.

2. Non-resident students may register at any time during the year; resident students must register during the first week of either semester, or during the first week of the Summer Session. A renewal of all existing registrations must be made at the beginning of each college year.

3. At the time of registration, the candidate, after conference with the instructor or instructors interested, shall out-

line the work intended and the studies desired, and present such outline to the Committee on Graduate Instruction for its approval. The courses selected should be well coördinated. They may be from one or several departments of the College and include such additional work as may be outlined by the instructors under whom work is desired.

4. To obtain the degree either of Master of Arts or of Master of Science, thirty credits, representing one year's resident work (September to June), will be necessary. Credits acquired in the graduate courses of the summer or Saturday sessions may be counted. The degrees may also be obtained *in absentia* with the limitation that in case of complete non-residence they will not be conferred before the third Commencement after registration.

5. Graduates of Middlebury College who have to their credit work done in undergraduate years, and not counted for a baccalaureate degree, may count such credits toward an advanced degree, provided, however, that the work is approved by the Committee on Graduate Instruction, and has been completed with a grade of at least 80 per cent.

6. No credits counted in conferring a first degree at Middlebury College, or elsewhere, shall be accepted for a second degree.

7. Work done *in absentia* must be completed within five years, unless this period is extended by vote of the Faculty.

8. All candidates must present themselves for a final examination and receive the degree in person.

9. Resident candidates will be charged regular tuition fees; non-resident candidates will be charged a registration fee of $10 annually. There is no additional fee either for examinations or for diploma.

EXAMINATIONS

The semester grade in any study is obtained by combining the recitation mark with the examination mark in the ratio of three to one.

A student whose term mark in any course falls below 50 per cent will be excluded from the examination and must repeat the course with the following class, except that, if the course be an elective one, he may substitute another elective.

A student will be conditioned whose combined recitation and examination mark at the close of a semester or of a study is below 60 per cent, unless the examination mark be as high as 70 per cent; but no student will be allowed to pass whose examination mark is below 50 per cent.

In order that a condition may be removed, either the average of the term mark and the new examination mark combined as above stated must reach 60 per cent, or the new examination mark must be as high as 70 per cent.

A student who fails to attain a passing grade in three or more courses in any semester will be summoned before the Administration Committee to show cause why he should not be dropped from College.

A student who fails to pass an examination at the close of the first semester, and is thereby conditioned, will be given an opportunity to take another examination either on the first day after the Easter recess, or on such one of the first three days of the college year as shall be determined by the Registrar. A student who is conditioned at the close of the second semester may take an examination on such one of the

first three days of the college year as shall be determined by the Registrar, or on the first day after the Christmas recess. No other opportunities for the removal of conditions will be given, except that a Senior may take examinations for deficiencies or conditions on the Saturday preceding Commencement and students attending Summer Sessions at the close of the sessions.

Any student failing to make up any condition as provided for above will be required to repeat the subject with the following class, even though, from conflict of hours, or any other cause, it necessitates for him the temporary omission of some of the regular work of his class.

Any student who is obliged by the operation of the foregoing rule to repeat with the following class subjects amounting to one-half, or more, of the regular hours of the term will be ranked as a member of that class.

A conditioned student who, because of the omission of the subject from the curriculum for the year, is prevented from repeating a study in which he is due shall, at the beginning of the second semester after his failure, elect another study in its place.

A student who is absent from any examination at the close of a semester will be required to pass that examination on or before the beginning of the corresponding semester of the following year. If the student fails to meet this requirement, he must repeat the course with the following class.

No student will be given Sophomore rank who has not made up his entrance conditions; and no student

will be given Junior rank until the work of the Freshman year is completed.

Students obliged to absent themselves from College for a determined period of time may obtain from the Dean the privilege of appearing for examination in subjects previously specified. The length and character of such examinations are determined by the instructor, and a grade of 75 per cent is required. Resident students will not be given credit for work done outside of class.

No student who is conditioned in more than one study will be excused from college exercises for the purpose of playing on an athletic team.

RECORD OF SCHOLARSHIP

At the close of a study, any student who desires it may receive from the Registrar a general statement of his rank in that study, based upon his term work and examination. If he has attained 90 per cent or above, his rank is reported as A, or excellent; if between 80 and 90 per cent, as B, or good; if between 70 and 80 per cent, as C, or fair; if between 60 and 70 per cent, as D; if below 60 per cent, the student is conditioned in that study. These reports are also given to parents by the Registrar upon request.

HONORARY APPOINTMENTS

The Faculty, under the direction of the Corporation, give to the first third of each department of each class, on the basis of scholarship, honorary appointments for Commencement. The valedictory and salutatory appointments are of equal rank, the former being

given to the leader among the men and the latter to the leader among the women. Those receiving honorary appointments for Commencement are eligible for election to the Phi Beta Kappa Society, provided that they have attained an average rank, for the entire course, of 85 per cent.

SPECIAL HONORS

As an incentive to best work by students of superior ability, who have strength to do more than should be required of the majority, and to promote and encourage special investigation in the various departments of the curriculum, the Faculty have established a system of honors. These are divided into two classes, Honors and Highest Honors, and may be attained by either of two methods.

Method 1. By carrying enough more than fifteen hours per week while an undergraduate to insure at graduation a surplus of 12 credits above the 120 credits required for the Bachelor's degree.

1. All such additional work must be done under the rules that govern the taking of more than fifteen hours per week.

2. All the elementary courses offered by the department in which the honors are sought must have been taken, unless excused for good reason by the instructors of that department.

3. The surplus of 12 credits must be for courses which would be counted for the Master's degree in the department in which the honors are sought.

4. The attainment of 80 per cent for Honors, and 90 per cent for Highest Honors, is requisite as an average rank in the studies of the department in which the honors are sought.

5. Credits for honors acquired in the above way may be counted later towards the Master's degree.

Method 2. By taking the courses offered in some department to the amount of at least 18 credits, and pursuing special investigation assigned by the department.

1. The attainment of 80 per cent for Honors, and 90 per cent for Highest Honors, is requisite as an average rank in studies of the department in which the honors are sought.

2. Additional work assigned by the instructor must be performed to the amount of 6 credits.

3. The preliminary payment of $5 a semester is required when laboratory work is involved.

These honors will be printed on the Commencement programme and in the next annual Catalogue, and will be certified to, when requested, by a written certificate from the President and the professor of the department, stating the nature and quality of the extra work done.

The degrees of A.B. and B.S. are conferred *cum laude* upon those who have attained an average rank, for the entire course, of 85 to 90 per cent; *magna cum laude* if that rank is 90 to 95 per cent; *summa cum laude* if it is 95 per cent or above.

PRIZES

The Deacon Boardman Peace Prize. Established in memory of Samuel Ward Boardman, 1789–1870. An annual prize of $30 to the member of the Junior class submitting the best essay in favor of peace, and in opposition to war as a method for settling international differences. The essay must be creditable as a literary composition and consist of at least 2,000 words.

The Pedagogy Prizes. Two prizes of $30 and $20 for the students of the Department of Pedagogy submitting the best essays on educational topics.

The Merrill Prizes. Four awards, $25, $20, $15, and $10, to the four men of the Sophomore class adjudged the best speakers at a contest on Monday evening of Commencement week.

The Parker Prizes. Two prizes of $20 and $10 to two of the competitors in the Freshman class who are adjudged the best speakers at the same contest.

In the Latin Department, recognition is made of excellence in the work of the second semester of the Sophomore year, including the preparation of a note-book exhibiting the debt of English poetry to Horace, by the presentation to the two successful competitors of reproductions of works of classic art, selected by the head of the department.

THE EGBERT STARR LIBRARY

The Library of Middlebury College is older than the institution itself. Before the granting of the charter the benevolent and progressive citizens of the town had collected some 500 well-chosen volumes for the use of students. Volumes bearing the autographs of some of the founders are still on the library shelves. In the early history of the College two flourishing student organizations, the Philomathesian and Philadelphian Societies, founded libraries which were unusually extensive and valuable for the time, and many of their volumes are still among the treasures of the College.

Great improvement in the Library was made during the administration of President Cyrus Hamlin (1880–85), who removed the books from the Chapel to the north division of Painter Hall, and opened all the shelves to the students.

The beautiful and convenient marble Library now occupied was erected with funds bequeathed by Mr. Egbert Starr, and dedicated during the centennial exercises of the College in July, 1900. The cost of the building was $50,000, to which was added $5,000 for its decoration and $5,000 for the purchase of books by the son of the donor, Dr. M. Allen Starr. The front of the building is entirely devoted to a large and convenient reference library, and the capacity of the stacks is 90,000 volumes. The entire Library now contains about 30,000 volumes, and is a depository of government publications. The number of volumes added the past year was 1,278, besides 306 government documents. Students are granted free access to all the shelves. The building is open continuously through the working hours of the day. The reference rooms contain a large number of reviews and magazines, and reading rooms with daily and weekly papers are maintained in Painter and Pearsons Halls. A reference library on education is provided in the rooms of the Department of Pedagogy.

The Library staff has recently been increased. The appropriation for Library purposes is now $3,500 a year, and several gifts of money for additions to the Library have been received, as well as a number of volumes by donation. A few students from the upper classes are given employment in the Library in part payment of their tuition.

THE WARNER SCIENCE HALL

THE studies in the Departments of Physics, Biology, Geology, Chemistry, and Home Economics are pursued in the large and convenient Warner Science Hall, erected in 1901 through benefactions of the late Ezra J. Warner, of the Class of 1861. The building is a memorial of his father, Hon. Joseph Warner, formerly a resident of Middlebury, and a trustee of the College from 1850 to 1865. By the will of Mr. Warner the College has received a bequest of $25,000 for the care and maintenance of the Hall, and for the purchase of supplies for the departments which it accommodates.

The Department of Physics is located on the first floor, and comprises a main laboratory for student use with sufficient apparatus for two full years of study and investigation in Physical Science, a private laboratory for the instructor, and a physical lecture room.

The Departments of Biology and Geology occupy the second floor. Here are laboratories for the study of Geology, Comparative Botany, and Zoölogy, and the museums of geological and zoölogical specimens.

The third floor is devoted entirely to Chemistry. Convenient laboratories for qualitative and quantitative analysis, a private laboratory for the instructor, a dark room for photography, and a chemical lecture room are included in the equipment.

A pleasant and convenient laboratory of Home Economics has been fitted up and equipped.

Advanced study and independent research are encouraged in each of the natural and physical sciences, and in the modern and well-furnished laboratories

of this building abundant opportunities are afforded to the student.

THE HALL OF CHEMISTRY

After September, 1913, the Department of Chemistry will be located in the new laboratory building erected with a portion of the General Education Board fund of $200,000.

This building is 44 by 100 feet, three stories, and the basement is lighted with full-sized windows, so that for all practical purposes it constitutes another story. The material is Vermont marble, laid in random ashlar, with rubbed white marble trimmings.

In the basement are the combustion and assay rooms, the organic laboratory, the laboratory for water and milk analysis, the fan room for the extensive flue and ventilation system, a balance room, two dark rooms for photography, and four store rooms.

The first floor will be used at present for the Department of Home Economics and other general purposes.

The second floor provides two large laboratories for qualitative and quantitative work, a private laboratory for research work, a large library and conference room, a hydro-sulphide room connecting with the qualitative laboratory, two balance rooms, and a store room.

On the upper floor are the general chemical laboratory, which is fitted with fifty-six desks and ample hood room, a large lecture room with raised seats and a lecture table with hoods, a store room, a balance

room, and the private laboratory and office of the head of the department.

The building is completely equipped with water, air, and gas pipes, and with electricity for light and power. The interior finish is white unglazed brick. The building is perfectly lighted by a hundred spacious windows, and is attractively located on the college quadrangle, facing the McCullough Gymnasium.

THE MUSEUM OF NATURAL HISTORY

Among the professors of the College for many years have been men of marked ability in natural science, who have shared with the institution the fruits of their researches. One of the earliest geological surveys of Vermont was conducted by Professor Charles B. Adams, who then occupied the chair of Natural History. He laid the foundation for the large collection of fossils representing the different geological formations. The work of Professor Henry M. Seely, long connected with the College, is in evidence in the large collection of fossils of the Champlain Valley.

In Botany, the complete series of the flowering plants and ferns of the Champlain region, which was collected by President Brainerd, is especially notable. This herbarium is constantly increasing, and valuable additions have been made in recent years in the higher fungi and other cryptogamous plants gathered by Dr. Edward A. Burt.

THE McCULLOUGH GYMNASIUM

In 1910 Hon. John G. McCullough of Bennington offered to give $25,000 towards the erection of a gymnasium, and the alumni of the College completed a gymnasium fund of $50,000 at Commencement of that year. The building was dedicated at the Commencement of 1912. The material is light marble, and the style colonial, like the other buildings of the College. The dimensions are 110 by 57 feet. The main floor contains a large exercising room and basket-ball court, with a room for smaller gymnastic classes, which also serves as a stage for dramatic representations. The first floor contains a locker room, with space for 375 lockers, abundant shower baths, director's office and examination room, faculty locker room, two hand-ball courts, boxing and fencing room, and quarters for visiting athletic teams. A convenient serving room renders the building available for college banquets.

Courses in physical education are offered to all students and are required of Freshmen and Sophomores. This work is under the direction of Mr. Ray L. Fisher, who is also in charge of all college athletics.

THE PORTER ATHLETIC FIELD

In the spring of 1913 the College will take possession of a new athletic field, purchased and equipped at a cost of $10,000, the gift of a friend. The field is east and south of the Library, lands extending from the Cornwall road to South Street, owned recently by Professor Howard, the Linsley estate, and Mr. J. Edwy Buttolph, but known to older graduates as part

of the Porter farm. It is about eighty acres in extent, beautifully situated, rolling meadow and pasture, with never-failing springs and a grove of large pines, and commands an extensive view of the Green Mountains. In addition to ample space for baseball, football, track athletics, and tennis, there is a possibility of a residence street, extending from Main Street to South Street, and a skating pond. The athletic field will be known as Porter Field.

COLLEGE OFFICES

The office of the President is located on the third floor of the Chapel. The President may be seen from 11 to 12 A.M. every day except Sunday, and consultation by students on any subject of importance to them is cordially invited. When the President is out of town, the Senior Professor is in charge of the College, and may be consulted with equal freedom. A catalogue of all graduates, former students, and friends of the College is kept in the office, and prompt notification of change of address is requested. The President's home is the large dwelling built for the purpose by President Kitchell and purchased for the College with funds contributed by Hon. Joseph Battell of the Class of 1823.

Dean Lambert's office is in Painter Hall, middle division. Men desiring to be out of town while College is in session should first secure permission of him. Excuses for absence should also be presented to the Dean.

The Dean of Women has her office on the fourth

floor of the Chapel, where women may offer reasons for absence.

The office of the Registrar is in Painter Hall, middle division. All students are expected to register at the beginning of each semester. The Registrar's office will be open for this purpose on and after the Monday before the beginning of the college year.

The Treasurer of the College has his office in the National Bank of Middlebury, and may be seen during banking hours.

RELIGIOUS SERVICES

The exercises of each day, except Sunday, begin with religious services, which all students must attend. They are also required to attend public worship on Sunday morning, at such churches as are decided upon by the students or their parents.

In the Hemicycle of Warner Science Hall, the Young Men's Christian Association holds meetings on Tuesday evenings, and the Young Women's Christian Association on Wednesday afternoons, to which the students are welcome.

The College is non-sectarian, but seeks to promote a healthful religious influence.

HALLS OF RESIDENCE FOR MEN

Painter Hall was erected in 1814, and is one of the best examples of colonial architecture in New England. It was first known as West College, but since 1846 has borne the name of Gamaliel Painter, one of

the founders of the College, whose generosity provided the funds for the building.

Starr Hall was built in 1861, and was rebuilt, after a disastrous fire, in 1865. The funds for its erection were contributed by Charles and Egbert Starr. It has thirty-two suites, designed for two students each, consisting of study, bedroom large enough for two single beds, and closets.

Both halls are of gray limestone, and are substantial and comfortable buildings. A few years ago they were remodeled and furnished with bathrooms, water-closets, steam heat, and electric light. The charges for rooms in both dormitories are the same, and are exceedingly moderate: $40 a year per student when two occupy a room, and $80 when a room is occupied singly, including light and heat in each case. The rooms in both halls are furnished with single iron beds; other furniture must be provided by the student, and may be purchased in Middlebury. Students should bring bedding.

In assigning rooms, preference is given to students in College in order of classes. A drawing for rooms for 1913–14 will be held June 7, 1913. Students now occupying rooms, and desiring to retain the same, may do so by depositing $5 advance payment on room-rent with the Treasurer before June 7. Others desiring rooms for next year, including incoming students, may secure reservations by making the $5 advance deposit. Rooms not taken June 7 will be assigned to students applying later in order of application, irrespective of classes.

The halls will be ready for occupation by the students on the noon of the Monday that precedes the

opening of College after any vacation period; they will be closed for all vacation periods on the noon of the first Saturday after the period begins.

HALLS OF RESIDENCE FOR WOMEN

Pearsons Hall, a new building for women, was opened at the beginning of the college year in 1911. It is located on a commanding height overlooking the village, from which wide views of the Adirondacks and Green Mountains are obtained. The hall is of marble, of pleasing colonial design, and contains a large social hall, a gymnasium, and dressing and bathing rooms, besides both single and double living rooms.

Battell Cottage was enlarged in 1910, the addition furnishing the dining hall and kitchen for both the Cottage and Pearsons Hall. The two buildings together accommodate about one hundred women.

The house of Dr. M. H. Eddy, on Weybridge Street, was leased in September, 1912, to provide an additional home for girls. It is known as Eddy Cottage.

The price of board and room in each building is $200 a year, payable semi-annually in advance to the Treasurer of the College. Applications for rooms may be made to the Registrar, Middlebury College.

HAMLIN COMMONS

Table board is furnished to men at Hamlin Commons, a club conducted on the coöperative plan by

the students under the supervision of the President and the Treasurer of the College. The College owns the building, which is located just outside the Campus, and gives the use of it to the students without cost. The food is plain but abundant, and the cost is $3.50 a week. Payment is required each week, strictly in advance.

EXPENSES

THE location of the College in a small village in a frugal agricultural region favors economy, and by a resolute endeavor the expenses of students have been kept extremely moderate. The charges of the College are small, and the general expenses of students should not be large. The following table indicates the principal items:

Tuition	$80.00
Incidentals: library, reading room, gymnasium, etc.	12.00
Room rent in Starr or Painter Hall, including heat and light	40.00
Table board for 37 weeks, at $3.50 a week	129.50

In most of the elective courses in Chemistry, Biology, and Physics a laboratory fee of $5 for each semester is charged, as specified in the announcements of the several courses.

The charges for room rent, heat, and light in Starr and Painter Halls are on the supposition that two students occupy a room. When a student rooms alone, the charge for rent, including heat and light, is $80 per year.

Board and room for women in Pearsons Hall, Bat-

tell Cottage, and Eddy Cottage are $200 a year, payble semi-annually in advance.

Bills for tuition and other charges are rendered in October and February of each college year, and are then payable. If not settled before the January or June following, $5 is added to the account. A student who does not make payment at the opening of the following year stands suspended until the account is settled.

The charge for tuition is the same for men and women. Expenses for clothing, traveling, entertainments, etc., are not included.

SELF-HELP

For many years Middlebury has been known as a college at which exceptional opportunities are afforded to students who must depend largely upon their own resources in securing an education. The principal assistance a college can render in this respect is in keeping expenses down, especially the charges for room and board. Employment by which the student can earn a part of his expenses can usually be obtained about the College or in the village, although regular work cannot be promised before the student has arrived and his capacity and fitness are determined. Occupations in which students find employment are waiting on table, care of furnaces, farm and garden work, typewriting, tutoring, etc. The Deans keep a list of students desiring work, and applications should be made to them.

SCHOLARSHIPS

The College has a generous number of student bene-

fits, many of them given in early years at great self-sacrifice on the part of the donors. The income of these funds is expended exclusively in payment of the tuition, in whole or in part, of needy and deserving students of good deportment and application. When the number of students was much smaller, these funds allowed a somewhat more liberal bestowment of beneficiary aid than is now possible. It is not expected that those whose circumstances admit the full payment of college bills will apply for scholarship assistance. It is earnestly desired, however, that, where need requires, those who might not otherwise be able to receive a college education will apply for aid from this source. The College has a long record of special encouragement to those who are obliged to secure an education largely through their own efforts. Correspondence concerning scholarships should be directed to the President, who will furnish blanks for application.

Any scholarship may be forfeited at any time during the course through negligence or misconduct. When a student incurs more than one condition in any semester, or when he receives a second warning because of unexcused delinquencies, the scholarship allowance for that semester is thereby forfeited.

Among the student benefits dispensed by the College are the following:

The Waldo Fund, established by Mrs. Catherine Waldo of Boston.

The Baldwin Fund, received from the estate of John C. Baldwin, Esq., of Orange, N. J. The Waldo and Baldwin Funds are used in canceling college bills to the amount of $80 of each of twelve students whose

scholarship, deportment, and necessities warrant such a benefaction.

The Warren Fund, applied in payment of college bills of those who are preparing for the Gospel Ministry.

The Fairbanks Scholarships, established by Thaddeus Fairbanks, Esq., of St. Johnsbury.

The Levi Parsons Scholarships, established by Hon. Levi Parsons Morton of New York City.

The Daniel O. Morton Scholarship, established by Hon. Levi Parsons Morton of New York City.

The Penfield Scholarship, established by Allen Penfield, Esq., of Burlington.

The Emma Willard Scholarship, established by the Emma Willard Association, for the benefit of deserving young women.

The Charles A. Field Scholarship, given to the village of Proctor, Vermont, "as a memorial of regard for Fletcher Dutton Proctor and of gratitude to him, and for courtesies received at the hands of other residents of said village."

The A. P. Stafford Fund, "to assist needy students from Wallingford to an education."

The Windham County Congregational Conference Scholarship.

STATE SCHOLARSHIPS

An annual appropriation from the State of Vermont pays to the amount of $80 annually "the tuition and

incidental college charges of thirty students, one of whom shall be designated and appointed by each Senator in the General Assembly, such appointment to be made by such Senator from his respective county, provided any suitable candidate shall apply therefor, otherwise from any county in the State."

Any person prepared to enter College, desiring to take advantage of a State scholarship, should apply to one of the Senators of the county in which he resides, and the Senator may thereupon give him a certificate of appointment, which will cancel his tuition for two years. Should the Senators in the applicant's county already have made appointments, the student should immediately apply to the President of the College, as there may be a vacancy from some other county of which the applicant may avail himself.

Under this act, students of both sexes are eligible for appointment to a State scholarship. The same regulations as to forfeiture through misconduct and incurring conditions apply to State scholarships as to student benefits owned by the College.

ASSOCIATED ALUMNI

The officers and committees of the Associated Alumni of the College for the year 1912–13 are: *President*, Frank H. Seeley, '63, of Delhi, N. Y.; *Vice-Presidents*, Edwin L. Allen, '88, of Pittsburg, Pa., Alexander Macdonald, '92, of St. Regis Falls, N. Y., Edwin S. S. Sunderland, '11, of New York City; *Secretary and Treasurer*, Professor Frank W. Cady, '99, of Middlebury. *Central Committee:* Professor Charles B. Wright; Professor Duane L. Robinson, '03; and Pro-

fessor Archibald D. Wetherell, '05. *Necrological Committee:* Thomas E. Boyce, '76, of Middlebury; Stanton S. Eddy, '94, of Middlebury; and Guy B. Horton, '00, of Burlington.

ALUMNI ASSOCIATIONS

Alumni Associations in New York, Boston, and Chicago hold annual meetings, and an Alumnae Association has been organized during the past year. The officers of the New York Association for the year 1912–13 are: *President*, Carl A. Mead, '91; *Secretary*, Sanford H. Lane, '05, 72 Broad Street, New York. *Executive Committee:* Percival Wilds, '02; Edwin W. Willcox, '04; Le Roy H. Hovey, ex-'04.

The officers of the Boston Association for the year 1912–13 are: *President*, Guy C. Lamson, '96; *Secretary and Treasurer*, Miss Rena I. Bisbee, '00, 182 Palfrey Street, Watertown, Mass.

The officers of the Chicago Association for the year 1912–13 are: *President*, George E. Plumbe, '61;* *Secretary*, Seymour Edgerton, '88, 803 New York Life Building, Chicago.

The executive board of the Alumnae Association for the year 1912–13 are: *President*, Mrs. Annie Ritchie Megathlin, '94, of Walpole, N. H.; *Vice-President*, Miss Frances Warner, '05, of Middlebury; *Secretary*, Miss Eleanor S. Ross, '95, of Rutland; Miss Florence C. Allen, '98, of Brattleboro; Miss Carmen R. Walker, '11, of Ludlow.

* Died April 24, 1912.

DEGREES CONFERRED IN 1912

HONORARY DEGREES

Doctor of Divinity

William Tades Elsing

Doctor of Laws

Guy Potter Benton
Charles Frederick Mathewson
George Haselton Sweet, '62
Theodore Newton Vail

Doctor of Science

Charles Ford Langworthy, '87

Master of Arts

Joseph Nathaniel Barss
John Eliakim Weeks

DEGREES IN COURSE[1]

WITH COMMENCEMENT APPOINTMENTS

Master of Arts

Wayne Cook Bosworth, '11
Harry Allen Farrar, '10
James Leigh Richmond, '08
Harold Allen Severy, '09
Cora Elizabeth Talbot, U. V. M., '03
Chester Monroe Walch, '07

Bachelor of Arts

Philip Sheridan Andrus
Charles Wright Bundy
William Christie Duncan
Marcus Franklin Gorham* † ¶ [4, 5]
Carl Diedreich Grupe [2]
Ivers Alfred Hackett
Arthur Webster Harris*
Ralph Warner Hedges
Philip Evans Kidder* † ¶

* Commencement Honors.
† Degree conferred *cum laude*.
¶ Phi Beta Kappa.
2. Honors in Chemistry.
4. Honors in English.
5. Highest Honors in French.

[1] Correction. The name of William Eric Blackmore Barnes, of the Class of 1911, was omitted by mistake from the list of those given in the Catalogue of 1911–12 as receiving the degree of Bachelor of Arts.

Arthur Burt King
John Kopke*
Michael Joseph Lahiff
Willys Merritt Monroe* †¶
Lewis Chester Morrison
Charles William Mulcahy
Clinton Seymour Reynolds* ‡¶
Edward Joseph Ryan*
George Goldthwaite Taylor[1]
Arthur Charles Thomas
Earle Thurman Tracey
Wayland Flint Walch[2]

Mabel Lois Agnew* †¶[8]
Alice Weed Barnum
Edith Marjorie Bates* §¶[9]
Blanche Belle Bostwick
Mary Elizabeth Bresnehan* §¶[6, 9]
Margaret Helen Croft* †¶
Helen Lillian Crosby† [6, 11]
Cathleen Veronica Driscoll
Lou Mae Dutton
Mary Kathleen Edmunds
Grace Maria Ellis* †¶[6, 10]
Marguerite Adah Ellison
Genevieve Isabelle Elmer
Elma Pruda Harwood* †¶[3]
Thelma Gertrude Havens* ‡¶[8]
Ada Belle Hill
Ruth Hill
Sarah Hila Lewis
Helen Susan Merrill
Louise Frances Monroe[11]
Gertrude Martha Murdock
Laura Lucinda Newell[7]
Minnette Carrier Norton
Hazel Gertrude O'Connell* †¶[6]
Rachel Fellows Pike* †¶
Ruth Hamblin Richner[4]
Lena Dunbar Sears* †¶
Vivia Irene Stone
May Irene Thayer
Jessie Marion Warner
Lucy Amelia Willard

Bachelor of Science

Brooks Frederick Smith
Joseph Milton Stillson
Hugh Olin Thayer* †¶[2]
John Smith Woodward

* Commencement Honors.
† Degree conferred *cum laude*.
‡ Degree conferred *magna cum laude*.
§ Degree conferred *summa cum laude*.

1. Highest Honors in Chemistry.
2. Honors in Chemistry.
3. Highest Honors in English.
4. Honors in English.
5. Highest Honors in French.
6. Highest Honors in German.
7. Honors in German.
8. Highest Honors in History.
9. Highest Honors in Latin.
10. Honors in Latin.
11. Highest Honors in Zoölogy.

¶ Phi Beta Kappa.

PRIZE SPEAKING AWARDS

MERRILL PRIZES

Class of 1914

First Prize. Homer Ridgway Denison
Second Prize. Earland Bickford Cook
Third Prize. Howe Kendrick Cassavant
Fourth Prize. Benjamin Warner Fisher

PARKER PRIZES

Class of 1915

First Prize. Michael Francis Shea
Second Prize. George Clyfton Dade

PRIZES TO JUNIORS

HISTORY AND POLITICAL SCIENCE

First Prize. John Comstock Agnew
Second Prize. Walter Bernard McGuirk

ENGLISH

First Prize. Faith Blackmer Linsley
Second Prize. Dora Mabel Willson

PRIZES IN PEDAGOGY

First Prize. Edwin Lawrence Bigelow
Second Prize. William Eben Greenleaf

PRIZES IN HORACE

First Prize. Verena Italy Suter
Second Prize. Robert Edgar Bundy

STUDENTS

GRADUATE STUDENTS

Edith S. Atwood, '10	*Woodstock*
John M. Avery, '11	*Middlebury*
Maude E. Avery, '10	*Middlebury*
David H. Corkran, U. of Chatt., '92	*Middlebury*
Harry A. Farrar, '10	*Castleton*
Marcus F. Gorham, '12	*West Rutland*
John W. McCormack, '09	*Indian Lake, N. Y.*
Fred R. Noble, Bates, '08	*East Hampton, Ct.*
Gordon Peach, '11	*Buffalo, N. Y.*
Margaret F. Sheldon, '11	*Middlebury*

MEN

SENIORS : CLASS OF 1913

John Comstock Agnew	Sc.	*Port Henry, N. Y.*	D. K. E. House
John Alanson Arnold	Cl.	*Middlebury*	9 Weybridge St.
Dale Simpson Atwood	Sc.	*St. Johnsbury*	Chi Psi Lodge
Edwin Lawrence Bigelow	Ped.	*Stowe*	13 Starr Hall
Lacy Wheaton Bump	Sc.	*Potsdam, N. Y.*	D. K. E. House
Edgar Alonzo Carrier, Jr.	Cl.	*Colchester, Ct.*	9 Starr Hall
William Wallace Chalmers	Sc.	*Fitchburg, Mass.*	D. K. E. House
Theron Lee Culver	Sc.	*Royalton*	21 Starr Hall
Wilfred Edward Davison	Cl.	*Lower Cabot*	18 Painter Hall
Marvin James Dodd	Sc.	*East Orange, N. J.*	D. K. E. House
Rolland John Ellsbury	Sc.	*Willsboro, N. Y.*	8 Starr Hall
William Eben Greenleaf	Ped.	*West Haven*	D. S. Lodge
Shintaro Iwasaki	Cl.	*Osaka, Japan*	20 Starr Hall
Hammond Ladd	Sc.	*Wilburton, Okla.*	Hammond Hall
Bernard Arthur Leonard	Sc.	*Wallingford*	7 Starr Hall
Walter Bernard McGuirk	Sc.	*East Wallingford*	9 Starr Hall
Kendall Stone McLean	Cl.	*Boston, Mass.*	3 Weybridge St.
William Francis Pollard, Jr.	Cl.	*Riverside, Mass.*	7 Painter Hall
Hobart Bennett Potter	Cl.	*East Orange, N. J.*	D. U. House
Marshall Jewell Root	Sc.	*Providence, R. I.*	7 Starr Hall
Charles Leo Smiddy	Sc.	*New London, Ct.*	D. U. House
Hendrick Woodruff VanNess	Sc.	*Greenwich, N. Y.*	16 Painter Hall
Roy Harold Walch	Cl.	*Hudson, N. H.*	14 Painter Hall
Edward Chauncey Walker	Sc.	*Richmond*	14 Starr Hall
Edgar Jolls Wiley	Sc.	*Ticonderoga, N. Y.*	6 Starr Hall
Franklin Grandey Williams	Cl.	*Bridport*	7 Painter Hall
Harry Oliver Williams*	Cl.	*Rutland*	Chi Psi Lodge

* Not of full Senior rank.

JUNIORS : CLASS OF 1914

Harold Wallace Abbott	Sc.	*Derry, N. H.*	11 Starr Hall
George Grover Atherton-Barker	Cl.	*Saxonville, Mass.*	2 Pleasant St.
Robert Edgar Bundy	Cl.	*Bethel*	D. K. E. House
Willard Duncan Carpenter	Sc.	*Vergennes*	7 South St.
Howe Kendrick Cassavant	Cl.	*Albany, N. Y.*	Chi Psi Lodge
Laurance Webster Cluff	Ped.	*Hyde Park, Mass.*	23 Starr Hall
Elton Frick Cronk	Sc.	*Greenwich, Ct.*	D. U. House
Richard Stewart Esten	Ped.	*Middlebury*	55 Seminary St.
Howard Clinton Farwell	Sc.	*Providence, R. I.*	11 Starr Hall
Benjamin Warner Fisher	Sc.	*Vergennes*	D. U. House
Robert Henry Hill	Cl.	*Brooklyn, N. Y.*	8 Starr Hall
Arthur Russell Holden	Sc.	*Shirley, Mass.*	D. S. Lodge
Moses Gilbert Hubbard, Jr.	Cl.	*Summit, N. J.*	D. K. E. House
Ralph Mayo Hutchins	Sc.	*N. Stratford, N. H.*	23 Starr Hall
William Gleason Macfarlane	Cl.	*Cowansville, Que.*	2 Pleasant St.
William Kennedy Mac-Murtry*	Cl.	*Middlebury*	6 Starr Hall
Walter Irving Metcalf	Cl.	*Hydeville*	D. S. Lodge
Max Duffield Miles	Sc.	*Chicopee Falls, Mass.*	125 Main St.
Augustus Wilfred Frost Newman	Sc.	*Hoosac Tunnel, Mass.*	27 Starr Hall
George Herbert Seavey	Ped.	*Hudson, N. H.*	D. S. Lodge
Arthur Joseph St. John	Sc.	*Worcester, Mass.*	2 Starr Hall
Karl Isaac Solomon Sterns	Cl.	*Middlebury*	Chi Psi Lodge
Nobuzo Suyemitsu	Sc.	*Uwamachi, Japan*	15 College St.
Edward Robert Triggs	Sc.	*East Port Chester, Ct.*	5 Starr Hall
Homer Jackson Vail	Sc.	*Randolph*	20 Weybridge St.
John Charles Eliot Voss	Cl.	*Shoreham*	D. S. Lodge
Dominic Edward Weafer*	Sc.	*Morrisville*	D. K. E. House
Elmer Reed West	Cl.	*Ticonderoga, N. Y.*	D. S. Lodge
Charles Cushman Wilcox*	Cl.	*Greenfield, Mass.*	18 Painter Hall
William Francis Youngs	Sc.	*Summit, N. J.*	D. K. E. House

*Not of full Junior rank.

SOPHOMORES : CLASS OF 1915

George Isaac Abbott, Jr.	Sc.	*Bethel*	Chi Psi Lodge
George Remington Ayres	Sc.	*Ballston Spa, N. Y.*	13 Painter Hall
Frank Montell Bartow	Cl.	*Ridgewood, N. J.*	26 Starr Hall
John Nelson Beckwith	Cl.	*Bethel*	10 Painter Hall
Irving Lyman Cabot	Cl.	*Windsor*	21 Starr Hall
George Hamilton Chapman	Cl.	*Worcester, Mass.*	Chi Psi Lodge

Elbert Charles Cole	Cl.	*Orleans*	13 Starr Hall
John Alaric Crane	Sc.	*McIndoe Falls*	18 Seymour St.
George Clyfton Dade	Cl.	*Amesbury, Mass.*	27 Starr Hall
Clifford Theron Day	Sc.	*Morrisonville, N. Y.*	10 Starr Hall
Arthur True Ellison	Sc.	*Farmington, N. H.*	D. U. House
George Henry Gardner	Sc.	*N. Marshfield, Mass.*	1 Starr Hall
Wayne Martin Haller	Ped.	*Shelburne Falls, Mass.*	119 Main St.
Harold Webb Haskins	Cl.	*Bradford*	D. S. Lodge
Guy Clinton Hendry*	Cl.	*North Hampton, N. H.*	14 Painter Hall
John Mott Hoyt	Cl.	*Cornwall*	Middleb'y R. D. 2
Frank Silver King Hunt	Cl.	*West Lebanon, N. H.*	12 Painter Hall
Merritt Lee Jenkins	Ped.	*North Troy*	17 Painter Hall
Charles Sherman Jones	Cl.	*Castleton*	Chi Psi Lodge
James Thomas Kenure	Sc.	*New London, Ct.*	D. U. House
Albert Laburton Kimball	Sc.	*Bradford, Mass.*	28 Starr Hall
Carlisle George Kron	Sc.	*New Britain, Ct.*	3 Weybridge St.
Robert Loder	Sc.	*East Orange, N. J.*	D. U. House
George Wilson MacLaughlin	Sc.	*Ticonderoga, N. Y.*	5 Starr Hall
Grover Cleveland McCullough	Sc.	*Chatham, N. J.*	8 Painter Hall
Benjamin Van Dyke Maurice	Cl.	*Mamaroneck, N. Y.*	9 Painter Hall
Leonard Coleman Monahan	Sc.	*S. Framingham, Mass.*	10 Starr Hall
Thomas Hamilton Ormsbee	Cl.	*Brooklyn, N. Y.*	Addison House
Earle Leffingwell Parkinson	Sc.	*Middlebury*	D. S. Lodge
Thomas Kenneth Penniman	Cl.	*Meriden, N. H.*	25 Starr Hall
Rupert Aaron Phelps*	Sc.	*Marshfield*	18 Seymour St.
Frederick Reynolds Pihlman	Sc.	*Chatham, N. J.*	8 Painter Hall
Charles Spurgeon Randall*	Sc.	*Amesbury, Mass.*	6 Painter Hall
Aldo Alfred Ratti	Sc.	*Proctor*	16 Painter Hall
Ralph Walter Ray	Cl.	*Orwell*	Chi Psi Lodge
Alexander Albert Robertson*	Sc.	*Quincy, Mass.*	6 Painter Hall
Arthur Lyman Rogers	Sc.	*Lee, Mass.*	D. K. E. House
Oscar Bingley Rogers*	Sc.	*Remsenburg, N. Y.*	D. U. House
Michael Francis Shea*	Ped.	*New London, Ct.*	D. U. House
William Mollis Sistare, Jr.	Sc.	*New London, Ct.*	3 Weybridge St.
Harold Joseph Swezey	Sc.	*Patchogue, N. Y.*	24 Starr Hall
Oscar Voute	Sc.	*Montclair, N. J.*	D. U. House
Raymond Cyrus Whitney	Sc.	*Millbury, Mass.*	20 Weybridge St.
Roy Thaddeus Whitney	Sc.	*Shrewsbury*	13 Painter Hall

* Not of full Sophomore rank.

FRESHMEN : CLASS OF 1916

James Glenn Anderson	Ped.	*East Orange, N. J.*	15 Painter Hall
Eldon Adelbert Austin	Cl.	*Randolph Center*	12 Starr Hall
Henry Edward Aylward	Sc.	*Ludlow*	3 Weybridge St.

Lyle Edmund Batchelder	Sc.	*Peru*	3 Weybridge St.
Luke Emerson Bicknell	Sc.	*Charlemont, Mass.*	26 Starr Hall
Caleb Thorndyke Brickett	Cl.	*Haverhill, Mass.*	4 Weybridge St.
Robert Hart Bruce	Sc.	*Milford, N. H.*	31 Starr Hall
Darrell Douglass Butterfield	Ped.	*Middlebury*	30 South St.
Robert Burns Chalmers	Sc.	*Fitchburg, Mass.*	16 Starr Hall
William Eustace Chandler	Sc.	*Keene, N. H.*	25 Starr Hall
Philip Harrison Condit	Sc.	*East Orange, N. J.*	10 Painter Hall
Wayne Walter Constantine	Ped.	*Shelburne Falls, Mass.*	123 Main St.
Edward Joseph Coonerty	Sc.	*Windsor*	14 College St.
Graydon Arthur Cowles	Sc.	*New Britain, Ct.*	22 Starr Hall
George Marter Crawford	Sc.	*Wilmington, Del.*	10 Painter Hall
William Henry Crowell	Sc.	*Hyannis, Mass.*	4 Weybridge St.
Edward Marsh Dickinson	Cl.	*Lunenburg, Mass.*	89 Main St.
Carroll William Dodge	Cl.	*Pawlet*	3 Starr Hall
Robert Samuel English	Sc.	*Charlotte*	87 Main St.
Frederick Lyon Fish	Sc.	*Vergennes*	Chi Psi Lodge
John James Floyd	Sc.	*New London, Ct.*	D. U. House
Ralph Abram Foote	Sc.	*Cornwall*	D. K. E. House
Charles Atherton Fort	Sc.	*Middlebury*	2 Pleasant St.
Lloyd Blanchard Gale	Cl.	*Batavia, N. Y.*	125 Main St.
Ralph Harold Gillmore	Sc.	*Concord, N. H.*	31 Starr Hall
Ernest Elisha Grant	Sc.	*New York, N. Y.*	11 Painter Hall
Russell Hemphill	Sc.	*Westerly, R. I.*	15 Starr Hall
Earl Frederick Horsford	Cl.	*Charlotte*	87 Main St.
Joseph Warren Howe	Cl.	*Valatie, N. Y.*	Chi Psi Lodge
Edward Shepard Huntley	Cl.	*New London, Ct.*	3 Weybridge St.
Winfield Scott Huntley, Jr.	Sc.	*Middlebury*	117 Main St.
Joseph Pullman Irons	Sc.	*Mamaroneck, N. Y.*	9 Painter Hall
James Burt Jones, Jr.	Sc.	*Batavia, N. Y.*	125 Main St.
William Russell Keefe	Sc.	*Greenfield, Mass.*	19 Starr Hall
Franklin Patton Kellom	Sc.	*Winchester, N. H.*	32 Starr Hall
Raymond Haskell Kiniry	Sc.	*Windsor*	Chi Psi Lodge
Joel John Lamere	Cl.	*Ludlow*	14 Starr Hall
Harold Grant Locklin	Sc.	*Richford*	87 Main St.
Allen Prest Logan	Sc.	*East Orange, N. J.*	29 Starr Hall
Bryson de Haas McCloskey	Sc.	*Oswego, N. Y.*	D. U. House
Dan Owen Mason	Cl.	*Hardwick*	30 Starr Hall
Julius Stevens Mason	Sc.	*Hanover, N. H.*	17 Starr Hall
Alvin Robert Metcalfe	Sc.	*Worcester, Mass.*	32 Starr Hall
Leon Pierpont Millard	Sc.	*New Britain, Ct.*	3 Weybridge St.
John Gregory Moskoffian	Ped.	*Sivas, Armenia*	19 Starr Hall
Arthur James Mott	Cl.	*Bristol*	15 Painter Hall
Alban James Parker	Sc.	*Morrisville*	17 Painter Hall
Carley Edward Paulsen	Sc.	*New York, N. Y.*	28 Starr Hall
Carl Wilkins Perkins	Cl.	*Rutland*	125 Main St.

Elmer Sampson Pierce	Sc.	*Rockland, Mass.*	24 Pleasant St.
Gerald Herbert Porter	Sc.	*Wilmington*	12 Painter Hall
Gordon Moore Robinson	Sc.	*New Britain, Ct.*	22 Starr Hall
Eugene Halsey Rogers	Sc.	*Remsenburg, N. Y.*	12 Starr Hall
Carroll Goulding Ross	Cl.	*Rutland*	Chi Psi Lodge
John Edward Rourke	Sc.	*Brooklyn, N. Y.*	10 Starr Hall
Donald Worcester Salisbury	Sc.	*South Orange, N. J.*	15 Starr Hall
Frank Raymond Schwarzwalder	Sc.	*East Orange, N. J.*	29 Starr Hall
Charles Floyd Seymour	Sc.	*Littleton, N. H.*	D. S. Lodge
Ralph Pendleton Shedd	Sc.	*New Braintree, Mass.*	20 Starr Hall
George Henry Snyder	Ped.	*Granville, N. Y.*	2 Pleasant St.
Harold Taylor	Sc.	*Stow, Mass.*	Hammond Hall
William Grady Thomas	Sc.	*New London, Ct.*	3 Weybridge St.
William Walter Thomas	Cl.	*North Poultney*	1 Starr Hall
Paul Davis Thompson	Sc.	*Fitzw'm Depot, N.H.*	14 Starr Hall
Maurice Tuttle, Jr.	Sc.	*Westha'n Beach, N.Y.*	24 Starr Hall
Richard Stokes Wall	Sc.	*New London, Ct.*	D. U. House
Carlton Henry Warner	Ped.	*Middlebury*	Chi Psi Lodge
Leon Howard Alexander Weaver	Sc.	*Montclair, N. J.*	17 Starr Hall
Lawrence Washburn Wild	Cl.	*Springfield*	3 Starr Hall
Joseph Alexis Wilson	Sc.	*Amesbury, Mass.*	30 Starr Hall
Lawrence Henry Woodward	Sc.	*Warrensburg, N. Y.*	20 Weybridge St.
Charles Horton Wright	Sc.	*Akron, Ohio*	2 Storrs Ave.

WOMEN

SENIORS: CLASS OF 1913

Fannie Gertrude Alden	Cl.	*Proctor*	36 Pearsons Hall
Mary Townsend Archibald	Cl.	*Rutland*	2 Pearsons Hall
Laurie Romola Besiegel	Ped.	*Dalton, Mass.*	19 Battell Cottage
Esther Alice Boyce	Cl.	*N. Andover, Mass.*	38 Pearsons Hall
Ruth Mary Brookins	Cl.	*Middlebury*	6 South St.
Sarah Davis Brown *	Cl.	*Huntington, Mass.*	28 Pearsons Hall
Faye Belle Butterfield	Cl.	*Middlebury*	30 South St.
Caroline Elizabeth Buttolph	Cl.	*Middlebury*	111 Main St.
Julia Clifford Carter	Ped.	*Ferrisburgh*	31 Pearsons Hall
Florence Ardelle Clark	Cl.	*Brookville, Mass.*	26 Pearsons Hall
Wilma Caroline Cory	Cl.	*Saxtons River*	2 Pearsons Hall
Bessie Mildred Cudworth	Ped.	*S. Ashburnham, Mass.*	29 Pearsons Hall
Edith Mary Darrow	Cl.	*Middlebury*	3 Weybridge St.
Helen Atarah Harriman	Cl.	*North Adams, Mass.*	27 Pearsons Hall
Jessie Lucinda Haskins	Cl.	*Granville, N. Y.*	4 Pearsons Hall
Bertha Annette Holden *	Cl.	*Pittsford*	34 Pearsons Hall

Alice Adella Holmes	Cl.	*Proctor*	36 Pearsons Hall
Eva Adelia Holt	Cl.	*West Rutland*	23 Pearsons Hall
Phyllis Edwards Hopkins	Cl.	*Belchertown, Mass.*	29 Pearsons Hall
Kathleen Amelia Hunt	Ped.	*Middlebury*	Middle'y R. D. 4
Mary Ida Johnson	Cl.	*Wallingford*	28 Pearsons Hall
Emma Elizabeth Kingsley	Ped.	*Middlebury*	11 Elm St.
Faith Blackmer Linsley	Cl.	*Middlebury*	39 Pearsons Hall
Alice Rachel Peaslee	Cl.	*Contoocook, N. H.*	37 Pearsons Hall
Mary Colton Reynolds	Cl.	*Fair Haven*	22 Pearsons Hall
Margaret Sharpe	Cl.	*Greenwich, N. Y.*	41 Pearsons Hall
Annah Belle Sheldon	Cl.	*Salisbury*	6 South St.
Charlotte Leavitt Slocum	Cl.	*Amherst, Mass.*	39 Pearsons Hall
Barbara Harriet Smith	Cl.	*Weybridge*	21 Pearsons Hall
Mildred Adeline Snow	Cl.	*Bellows Falls*	32 Pearsons Hall
Anna Mae Sterling	Ped.	*Middlebury*	125 Main St.
Ruby May Vosburgh*	Cl.	*Middlebury*	50 Court St.
Dora Mabel Willson	Cl.	*Lunenburg*	5 Franklin St.
Stella Alice Wooster	Ped.	*Middlebury*	8 Elm St.

* Not of full Senior rank.

JUNIORS: CLASS OF 1914

Florence Mary Aseltine	Cl.	*Enosburg Falls*	24 Pearsons Hall
Ellen Mary Bailey	Cl.	*Wells River*	40 Pearsons Hall
Harriet Beecher Blakeman	Cl.	*Stratford, Ct.*	35 Pearsons Hall
Helena Belle Carpenter	Ped.	*Enosburg Falls*	6 South St.
Sophia Noela DuBois	Ped.	*Bethel*	11 Pearsons Hall
Alice Maria Easton*	Cl.	*Middlebury*	69 Pleasant St.
Amy Harriet Edmands	Cl.	*Island Pond*	9 Pearsons Hall
Isabelle Upton Esten	Cl.	*Middlebury*	55 Seminary St.
Stella Agnes Farrell	Ped.	*Middlebury*	38 College St.
Helen Louise Foss	Cl.	*Charlestown, N. H.*	25 Pearsons Hall
Mary Madeline Geran	Ped.	*Holyoke, Mass.*	8 Pearsons Hall
Irene Augusta Graves	Cl.	*St. Albans*	38 Pearsons Hall
Jessie Martha Graves	Cl.	*Walpole, N. H.*	45 Pearsons Hall
Eleanor Whitney Hatch	Ped.	*St. Albans*	22 Pearsons Hall
Helen Irene Haugh	Cl.	*Waterbury, Ct.*	21 Pearsons Hall
Charlotte Florence Jenne	Cl.	*Enosburg Falls*	24 Pearsons Hall
Gertrude Frances Kingsley	Ped.	*Middlebury*	11 Elm St.
Ethel Caroline Magoon	Cl.	*Coos, N. H.*	25 Pearsons Hall
Ruth Adelle Noyes	Cl.	*Salisbury*	10 College St.
Florine Margaret Parker	Ped.	*Essex, Ct.*	48 Pearsons Hall
Mary Edna Rockwood	Cl.	*Middlebury*	12 Seminary St.
Mary Agnes Shea	Ped.	*Middlebury*	11 High St.
Verena Italy Suter	Cl.	*Swanton*	9 Pearsons Hall

* Not of full Junior rank.

Gladys Wilson	Cl.	*Bethel*	32 Pearsons Hall
Julia Bosworth Wood	Ped.	*West Upton, Mass.*	33 Pearsons Hall

SOPHOMORES: CLASS OF 1915

Ida Nell Ainsworth	Ped.	*South Royalton*	12 Pearsons Hall
Myrtle Helen Bain	Cl.	*Middlebury*	37 Washington St.
Mary Ruth Bartley	Ped.	*Ashuelot, N. H.*	13 Battell Cottage
Edythe May Boyce	Cl.	*Waterbury*	2 Battell Cottage
Mary Hayward Buck	Cl.	*Waterville, Ct.*	17 Battell Cottage
Florence Muzzey Butler	Cl.	*Rutland*	117 Main St.
Eliza Cady	Cl.	*Middlebury*	15 Pleasant St.
Ruth Dutton	Ped.	*South Royalton*	18 Battell Cottage
Emma Louise Feeney	Cl.	*Ballston Lake, N. Y.*	10 Pearsons Hall
Isabel Clara Field	Cl.	*Wells River*	40 Pearsons Hall
Sarah Katherine Fish	Cl.	*Vergennes*	47 Pearsons Hall
Sarah Louise Funnell	Ped.	*Huntington, N. Y.*	44 Pearsons Hall
Fannie Olive Gill	Cl.	*Springfield*	8 Battell Cottage
Harriet Frances Grandey	Ped.	*Rutland*	31 Pearsons Hall
Mae Eleanor Guerin	Cl.	*Worcester, Mass.*	4 Pearsons Hall
Ginevra Pollard Harlow	Cl.	*Chester*	48 Pearsons Hall
Clotilda Hayes	Cl.	*Lee, Mass.*	7 Battell Cottage
Ruth Hilton	Cl.	*Richmond*	46 Pearsons Hall
Annie Josephine Hulihan	Cl.	*Center Rutland*	6 Pearsons Hall
Irene Idelle Ingalls	Ped.	*Windham*	4 Battell Cottage
Ruth Kendall	Cl.	*Pittsford*	9 Battell Cottage
Irene Ethel McGregor	Ped.	*Waterbury, Ct.*	11 Pearsons Hall
Grace Irene Mead	Cl.	*Selkirk, N. Y.*	6 Pearsons Hall
Laura Louise Mead	Cl.	*North Ferrisburgh*	22 Battell Cottage
Mabel Alice Miller	Cl.	*Wells River*	12 Pearsons Hall
Margaret Park Mills	Cl.	*Townshend*	4 Battell Cottage
Sophie Donker Musgrove	Cl.	*Pittsfield, Mass.*	8 Battell Cottage
Helena Catherine Norton	Ped.	*Newport*	6 South St.
Ruth Dickinson Norton	Cl.	*Vergennes*	47 Pearsons Hall
Bernice Ellen Parker	Ped.	*Essex Junction*	26 Pearsons Hall
Cora Eleanor Parkman	Ped.	*Thompsonville, Ct.*	44 Pearsons Hall
Grace Elizabeth Peaslee	Cl.	*Contoocook, N. H.*	37 Pearsons Hall
Margaret Gates Pike	Ped.	*Waterbury*	46 Pearsons Hall
Frances Ruth Piper	Ped.	*Middlebury*	7 Weybridge St.
Elizabeth Joy Rose	Cl.	*Cornwall*	16 Battell Cottage
Adelaide Ross	Cl.	*West Rutland*	34 Pearsons Hall
Harriet Emily Smith	Cl.	*Addison*	12 Battell Cottage
Mary Alice Stone	Ped.	*Vergennes*	36 College St.
Marion Sarah Thomas	Cl.	*Middlebury*	10 College St.
Mabel Kathryn Tooley	Ped.	*Stratford, Ct.*	10 Battell Cottage
Josephine Tracy	Cl.	*Lee, Mass.*	7 Battell Cottage

Laura Eliza Walbridge	Cl.	*Brattleboro*	27 Pearsons Hall
Alice Ward Wilson	Ped.	*New Haven*	10 Pearsons Hall
Marjory Alexander Wright	Cl.	*Middlebury*	2 Storrs Ave.

FRESHMEN: CLASS OF 1916

Robberta Arnold	Ped.	*Worcester, Mass.*	6 Battell Cottage
Vera Emma Arnold	Cl.	*Quinebaug, Ct.*	11 Battell Cottage
Ruth Eliza Avery	Ped.	*Forestdale*	117 Main St.
Ada Barnes	Cl.	*Middlebury*	106 Main St.
Clara Pauline Barnum	Cl.	*Jericho Center*	Eddy Cottage
Lucia Madeline Besiegel	Cl.	*Dalton, Mass.*	Eddy Cottage
Helen Melina Bosworth	Cl.	*Bristol*	36 College St.
Harriet Edna Boyce	Ped.	*Waterbury*	2 Battell Cottage
Ruth Helen Conner	Cl.	*Methuen, Mass.*	Eddy Cottage
Gladys Jane Cook	Ped.	*Shoreham Center*	18 Washington St.
Anna Roberts Fisher	Cl.	*Vergennes*	Eddy Cottage
Reta Lorain Forbes	Ped.	*Middlebury*	18 South St.
Daisy Elizabeth Godfrey	Ped.	*Brandon*	117 Main St.
Ethel Paine Gorton	Ped.	*Naugatuck, Ct.*	Eddy Cottage
Isabel Annette Grant	Ped.	*Union, N. H.*	Hammond Hall
Ruth Lillian Greeley	Cl.	*Rochester*	Eddy Cottage
Isabel Griffith	Ped.	*Brandon*	9 Battell Cottage
Frances Madeline Guerin	Ped.	*Worcester, Mass.*	Eddy Cottage
Mary Elizabeth Halpin	Ped.	*Middlebury*	36 College St.
Hazel Louise Hazeltine	Ped.	*Reed's Ferry, N. H.*	15 Battell Cottage
Pauline Helms	Cl.	*Forest Hills, Mass.*	36 College St.
Katherine Hobbs	Ped.	*Worcester, Mass.*	36 College St.
Ina Belle Hodges	Ped.	*Richmond*	60 Seminary St.
Mary Elbra Holmes	Cl.	*Westminster Station*	3 Battell Cottage
Mertie May James	Cl.	*Madison, N. J.*	21 Battell Cottage
Mildred Hathaway Jones	Ped.	*Mansfield, Mass.*	1 Battell Cottage
Ruth Tyler Keet	Cl.	*Bernardston, Mass.*	36 College St.
Helen Esther Kenrick	Cl.	*Walpole, N. H.*	5 Battell Cottage
Marjorie Ruth Lee	Cl.	*Vergennes*	5 Storrs Ave.
Amy Iona McNall	Cl.	*Malden, Mass.*	Eddy Cottage
Charlotte Corbusier Marsh	Cl.	*Bridgeport, Ct.*	Eddy Cottage
Marjorie Martin	Cl.	*Middlebury*	60 Pleasant St.
Mabel Adeline Meade	Ped.	*Middlebury*	18 South St.
Harriet Clarissa Myers	Ped.	*Westmore*	36 College St.
Louise Delphine Nelson	Ped.	*Salisbury*	2 Washington St.
Dorothy Irene Noyes	Cl.	*Salisbury*	10 College St.
Rachel Horne Pressey	Ped.	*S. Groveland, Mass.*	36 College St.
Pauline Rowland	Ped.	*Sapporo, Japan*	Eddy Cottage
Elizabeth King Schoonmaker	Ped.	*Mansfield, Mass.*	1 Battell Cottage
Elizabeth Louise Smeallie	Cl.	*Yalesville, Ct.*	36 College St.

Cecile Maude Thomas	Ped. *Salisbury*	5 Battell Cottage
Flora Louise Willmarth	Cl. *Addison*	17 High St.
Martha Elizabeth Wooding	Ped. *Yalesville, Ct.*	36 College St.
Lois Belle Wright	Cl. *Middlebury*	112 Main St.

SUMMER SESSION OF 1912

F. Arlington Alden	B*	*Vergennes*
Julia M. Aiken	A	*Marshfield*
Grace L. Allen	C	*Ferrisburg*
J. Glenn Anderson	B	*East Orange, N. J.*
John A. Arnold	B	*Middlebury*
Alice N. Averill	A	*Barre*
Helen S. Averill	A	*Barre*
Ethel A. Bachmann	A	*Providence, R. I.*
Charles N. Bemis	A	*Lyndon*
Ethel E. Bohonon	A	*Marshfield*
Edith Brander	B	*Brooklyn, N. Y.*
Laurence L. Brown	C	*Fall River, Mass.*
Ruth M. Bryant	A	*Middlebury*
Almon W. Bushnell	A	*Strafford*
Faye B. Butterfield	B	*Middlebury*
Eliza Cady	B	*Middlebury*
Olive Calif	A	*Washington*
Angeline M. Carter	C	*Vergennes*
William H. Carter	C	*Vergennes*
Mary E. Colburn	C	*Stelton, N. J.*
N. Grace Cooledge	A	*Westfield*
David H. Corkran	C	*Middlebury*
Maude R. Corwin	A	*Castleton*
Nelson H. Crane	A	*McIndoes*
Herbert J. Darrow	A	*Middlebury*
Maria B. Darrow	A	*Middlebury*
Wilfred E. Davison	B	*Lower Cabot*
Cathleen Driscoll	B	*Ballston Spa, N. Y.*
Emma G. Easton	C	*Middlebury*
Rolland J. Ellsbury	B	*Willsboro, N. Y.*
Harry A. Farrar	C	*Chester*
Ethyl V. Goewey	A	*Troy, N. Y.*
Harvey E. Goodell	B	*Readsboro*
Lena M. Goodwin	C	*Marblehead, Mass.*
Carl D. Grupe	C	*Willsboro, N. Y.*

*A, College Extension Courses and Lectures; B, Courses leading to the degrees of A.B. and B.S.; C, Courses leading to the degrees of A.M. and M.S.

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Mae E. Guerin	B	*Worcester, Mass.*
Helen L. Hard	A	*Detroit, Mich.*
Abby M. Harriman	B	*Middlebury*
Arthur W. Harris	C	*Holland*
Eleanor W. Hatch	B	*St. Albans*
Alice Hemenway	C	*Bridport*
Elizabeth S. Jones	A	*Island Pond*
Archibald A. Lancaster	C	*Middlebury*
Inez M. Le Vick	A	*Middlebury*
Edwin Lewis	B	*North Chatham, N. Y.*
Katherine Lindsay	B	*Lawrence, Mass.*
Elizabeth MacNulla	A	*Middlebury*
Bertha M. Manney	A	*Randolph*
Benjamin V. Maurice	B	*Mamaroneck, N. Y.*
Stewart Maurice	B	*Mamaroneck, N. Y.*
Bryson de H. McCloskey	A	*Oswego, N. Y.*
Alice K. McGilton	A	*Middlebury*
Sylvia McKenney	A	*Middlebury*
Grace I. Mead	B	*Selkirk, N. Y.*
Leonard C. Monahan	B	*So. Framingham, Mass.*
S. Frederick Monroe	C	*Cos Cob, Ct.*
Edward Moore	C	*Island Pond*
Manual Noriega	A	*New Brunswick, N. J.*
Elizabeth Novak	A	*Middlebury*
Hazel O'Connell	C	*Middlebury*
Richard S. O'Connell	B	*Middlebury*
Thomas H. Ormsbee	B	*Brooklyn, N. Y.*
Rachel T. Pettengill	A	*Cambridge, Mass.*
Ardelle M. Pierce	A	*Middlebury*
Elmer S. Pierce	A	*Newton Center, Mass.*
Frances R. Piper	B	*Middlebury*
N. Pauline Ratti	A	*Evanston, Ill.*
Arthur L. Rogers	B	*Lee, Mass.*
Pauline Rowland	A	*Boston, Mass.*
Catherine M. Shea	A	*Middlebury*
Frank P. Shea	C	*Middlebury*
Mary A. Shea	B	*Middlebury*
Amalia S. Smith	A	*Brooklyn, N. Y.*
Leonard D. Smith	C	*Morrisville*
Anna M. Sterling	B	*Middlebury*
George G. Taylor	C	*Granby, Mass.*
Norma Taylor	A	*Middlebury*
Marion S. Thomas	B	*Middlebury*
Hendrick W. Van Ness	B	*Greenwich, N. Y.*
Edward C. Walker	B	*Richmond*
Rachel J. Wilbur	A	*Brooklyn, N. Y.*

46 + 3 + 35 = 84

Edna H. Wilder	B	*New Haven*
Josephine Wilcox	B	*Lake Forest, Ill.*
Frederick L. Woodlock	A	*Allston, Mass.*

SUMMARY

	Men	*Women*	*Total*
Graduate Students	7	3	10
Seniors	27	34	61
Juniors	30	25	55
Sophomores	44	44	88
Freshmen	72	44	116
	180	150	330
Summer Session	35	49	84
Total			414
Counted twice			23
Net Total			391

CLASSIFICATION BY COURSES

UNDERGRADUATES ONLY

Men	*Classical*	*Scientific*	*Pedagogical*
Seniors	10	15	2
Juniors	12	15	3
Sophomores	15	26	3
Freshmen	15	51	6
Women			
Seniors	27	0	7
Juniors	16	0	9
Sophomores	29	0	15
Freshmen	20	0	24
Total	144	107	69

GEOGRAPHICAL DISTRIBUTION

UNDERGRADUATES ONLY

	Men	*Women*	*Total*
Vermont	59	94	153
Massachusetts	32	25	57
New York	26	5	31
Connecticut	15	12	27
New Hampshire	15	9	24
New Jersey	15	1	16
Rhode Island	3	0	3
Japan	2	1	3
Long Island	1	0	1
Delaware	1	0	1
Ohio	1	0	1
Oklahoma	1	0	1
Canada	1	0	1
Turkey	1	0	1
	173	147	320

COLLEGE CALENDAR

1912.

SEPTEMBER 19.	*Thursday*, 8.45 *a.m.* Beginning of first semester.
NOVEMBER 27 *to* DECEMBER 2.	*Wednesday to Monday.* Thanksgiving Recess.
DECEMBER 21 *to* JANUARY 2.	*Saturday to Thursday.* Christmas Recess.

1913.

JANUARY 24.	*Friday.* Winter Meeting of the Corporation in New York.
JANUARY 27 *to* FEBRUARY 1.	*Monday to Saturday.* Mid-year Examinations.
FEBRUARY 1.	*Saturday.* End of first semester.
FEBRUARY 3.	*Monday.* Beginning of second semester.
FEBRUARY 7.	*Friday.* Mid-year Meeting of the Phi Beta Kappa Society.
FEBRUARY 22.	*Saturday.* Washington's Birthday.
MARCH 21–31.	*Friday to Monday.* Easter Recess.
MAY 8–10.	*Thursday to Saturday.* Junior Week.
MAY 30.	*Friday.* Memorial Day.
JUNE 9–13.	*Monday to Friday.* Final Examinations.
JUNE 15.	*Sunday.* Commencement Sunday. 10.45 *a.m.* Baccalaureate Sermon. 8.00 *p.m.* Anniversary of the Christian Associations.
JUNE 16.	*Monday.* Class Day. 10.30 *a.m.* Class Day Exercises. 3.00 *p.m.* Annual Meeting of the Phi Beta Kappa Society. 8.00 *p.m.* Parker and Merrill Prize Speaking.

June 16.	8.00 *p.m.* Annual Meeting of the Corporation.
June 17.	*Tuesday*. Alumni Day. 8.00 *p.m.* Commencement Concert.
June 18.	*Wednesday*. Commencement Day. 9.00 *a.m.* Meeting of the Alumni in the Chapel. 10.30 *a.m.* Commencement Exercises. 1.00 *p.m.* Commencement Dinner. 7.30 *to* 9.00 *p.m.* President's Reception.
July 1 *to* August 8.	Summer Session.
September 18.	*Thursday*, 8.45 *a.m.* Beginning of first semester.
November 26 *to* December 1.	*Wednesday to Monday*. Thanksgiving Recess.
December 24 *to* January 5.	*Wednesday to Monday*. Christmas Recess.
1914.	
January 26–31.	*Monday to Saturday*. Mid-year Examinations.
January 31.	*Saturday*. End of first semester.
February 2.	*Monday*. Beginning of second semester.

Note. All recess dates are inclusive.

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